SCHOOL EDUCATION
IN
GOA

Status, Issues and Future Perspectives

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NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
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Foreword

During the last 40 years the National Council of Educational Research and Training (NCERT) has been working in collaboration with the Central Government, State Governments, State level institutions and Non-Governmental Organisations (NGOs) on school education. Within this period it has taken up various projects to build a solid base of data and brought out documentations on significant aspects of school education. Two well-known documentations are — All India Educational Surveys and Educational Research Surveys. These publications form an integral part of NCERT's activities.

Keeping in view the importance of relevant information on school education, it was proposed that the *State level studies in school education* may be conducted with a view to record *status, issues* and *future perspectives.*

A National Advisory Group was constituted to prepare an approach paper and project implementation plan, which was discussed with the state authorities in various meetings organised for the purpose. The main questions which were discussed in Orientation: what is the state of art of school education, including Education for All, adult literacy, alternative schooling; what are the problems and issues connected with various levels of school education viz., Pre-Primary, Primary, Secondary and Senior Secondary Schools; what are the success stories of each state which could be replicated in other states; what are the gaps and emerging issues which need to be tackled effectively; what kind of incentives are being offered to children of weaker sections; what is the role of non-governmental agencies; and how effective is community participation, academic support system and teacher professionalism?

The Directors of State Councils of Educational Research and Training/ State Institutes of Education (SCERTs/SIEs) were of the view that these questions are relevant and data be collected in the proposed state studies. The major objectives of the state studies thus were identified as:

❖ To study the progress achieved in development of school education, adult litertacy and programmes of alternative schooling in the States/ Union Territories during the last 50 years.

❖ To identify the major policy initiatives taken, strategies adopted, innovations and experiments undertaken by the States/Union Territories to achieve goals and targets of Education for All.

❖ To identify the gaps and problems faced by the States/Union Territories in implementing the national and state level policy objectives of achieving Education for All, promoting quality of school education from Pre-Primary to Senior Secondary Classes, providing relevant curricula, modernising teaching-learning processes, etc.

❖ To study matters, such as provision of school facilities and their utilisation, incentives to children from the weaker sections, teacher professionalism, role of non-governmental agencies, community participation, academic support system, mobilisation of resources for education.

❖ To study implementation of educational schemes and monitoring mechanism.

❖ To suggest strategies and a plan of action for the future so as to adequately address the issues/tasks which need to be resolved/fulfilled in the State/Union Territory keeping in view the feasibility and the need to meet the emerging future challenges of the new millennium.

I express my gratitude to the members of the National Advisory Group who have rendered immense help in bringing out this report. I sincerely thank Mrs. Liana De Menezes, Director, SIE, Goa and her able team who could complete the work in record time and have given it a professional touch.

J.S. RAJPUT
Director
National Council of Educational
Research and Training

New Delhi
July 2003

Preface

The NCERT Project on State Studies in School Education was meant to study and trace the course of growth and development of School Education in the State during the fifty years of Independence, particularly from 1951 to 2000. The study would further relate to issues, problems, and future perspectives of School Education during the said period.

Goa is one of smallest and the youngest state that has at its credit, a very bright attainment in School Education including its efforts ranging from literacy to all stages of school education and, even in the field of higher education.

The State Institute of Education took up this assignment and has carried it out since December 2001. This task engaged the institution in the study of educational perspectives that reflect the course of its growth and development in the post-liberation period.

A team of three members worked on this assignment with the Director of State Institute of Education. Shri. Madhav Joshi monitored the task as the Academic Coordinator with Mr. Manohar Korgaokar, as the Project Fellow. Mrs. Suman Pednekar, Ex-Director of Education, kept herself associated with the assignment as the Project Consultant. The hard work that was put in and experience of the team members has been of a precious help in preparing this report.

Educationists who responded to various questions related to the educational development in the State have contributed to highlight several issues and problems. Among these educationists were the Ex-directors of Education, Officers of the Directorate of Education, Principal of the DIET, and teacher educators.

Mr. K.B. Marathe, Ex-Director, State Institute of Education has written the first chapter of this report. He has presented a very comprehensive analysis of the educational scenario in the State during and after the Portuguese Rule in Goa. The report finds its over-all reflection in this chapter.

The study involved consulting considerable reference material that necessitated finding access to libraries of the Directorate of Education and DIET. The Institute's library also provided very useful materials for this study. It must also be mentioned here that the team members could also study relevant thesis and dissertations from the library of Nirmala Institute of Education.

Shri P.R. Nadkarni, Chairman of Goa Board of Secondary, and Higher Secondary Education made available the results of SSC and HSC Examinations for last five years, Scheme of Examinations and Evaluation and Scheme of Vocational Education and other relevant materials. The completion of this assignment, could therefore, be said to be the result of a collective endeavour by a number of educationists.

This assignment also has proved to be a very useful learning experience for the institute, which, for the first time since its inception, worked on preparing a comprehensive report on school education in the state. The Approach Paper and Guidelines developed by the NCERT provided a framework for the Report and made the task easy.

I must acknowledge the support and inspiration received from a number of individuals in the process of this work. I express my gratitude to the officers of the Directorate of Education who offered their guidance in the project work. I am thankful to Dr Rita Pies, the Principal, Nirmala Institute of Education for providing useful literature from the College Library.

I express thanks to Shri. P.R. Nadkarni, the Chairman of the Goa Board of Secondary and Higher Secondary Education for his prompt help.

I must express my gratitude to the ex-Directors of SIE who initiated and followed up various formalities that kept this project on track.

I would like to conclude with a note of regards and gratitude to Professor J.S. Rajput, Director NCERT, and his colleague Dr R.P. Gupta, Profesor and Head, PPMED who are the main source of inspiration in this endeavour. The academic, administrative and financial support offered by them, has enabled this institution to work on this very useful project.

LIANA DE MENEZES
Director
State Institute of Education
and Project Director

Executive Summary

The chapter wise summary of the content

Chapter 1: Fifty Years of School Education

This chapter cites details of the following:

- ❖ Geographical, historical and demographical features of the land;
- ❖ General trends of progress and development of school education from 1951 to 2000;
- ❖ Committees appointed for reform in education in the last 40 years;
- ❖ Budgetary provisions made by the State for education since 1961;
- ❖ Problems and issues.

Chapter 2: Education for All (focus on ECCE and UEE)

This chapter covers details of attempts made by the State Government for universalisation of elementary education and early childhood education. The chapter lays stress on the following points:

- ❖ Expansion of Pre-primary and Primary schools;
- ❖ Teacher-pupils ratio and Student enrolment;
- ❖ Opportunity of schooling to the SC/ST children;
- ❖ Dropout rate in the state.

Chapter 3: Education for All (Focus on Literacy, Alternative schooling and Education of children with special needs)

This chapter deals with the programmes taken up the State for adult literacy, providing education through non-formal education mode; night schooling etc. It also gives information of the institutions imparting education to the handicapped and mentally retarded children.

Chapter 4: Secondary and Senior Secondary Education

This chapter delivers details of secondary and higher secondary education in the state covering the following points;

- ❖ Expansion of Secondary and higher secondary education in the state;
- ❖ Number of teachers, teacher-pupil ratio and students enrolment;
- ❖ Results of the SSC and HSC examinations in last five years;
- ❖ Alarming dropout rate at the end of standard X and causes thereof.

Chapter 5: School Infrastructure and Facilities

This chapter covers detailed information of infrastructural facilities provided to all kinds of schools at all levels of school education. The infrastructural facilities include the provision of school buildings in terms of pucca, semi-pucca and kachcha. Facilities such as drinking water, toilets and lavatories for boys and girls separately are dealt with in details in this chapter. The information, however, is based on the Sixth All India Survey Report of the Government of India as on September 30, 1993. An attempt still is made to relate this information to the present position so far as the latest information is available.

Chapter 6: Development of School Curriculum

This chapter traces the development of school curriculum in the State taking into account the rationale and strategies evolved from time to time. It covers in details the points such as:

❖ Status of curriculum development and changes evolved in it after 1975;

❖ Development of textbooks and curricular materials;

❖ Subject scheme and evaluation processes.

Chapter 7: Quality of Education: Teacher and Teaching Process

This chapter examines in details the scenario of teacher equipment and the teaching processes adopted by them. It also touches the teacher training and other inputs introduced by the state for quality improvement of education.

Chapter 8: Academic and Administrative Support System

This chapter presents details of academic and administrative set ups functioning in the state. Their structure with their functions and role are also cited in this chapter in details.

Chapter 9: Resources of School Education and Literacy Programmes
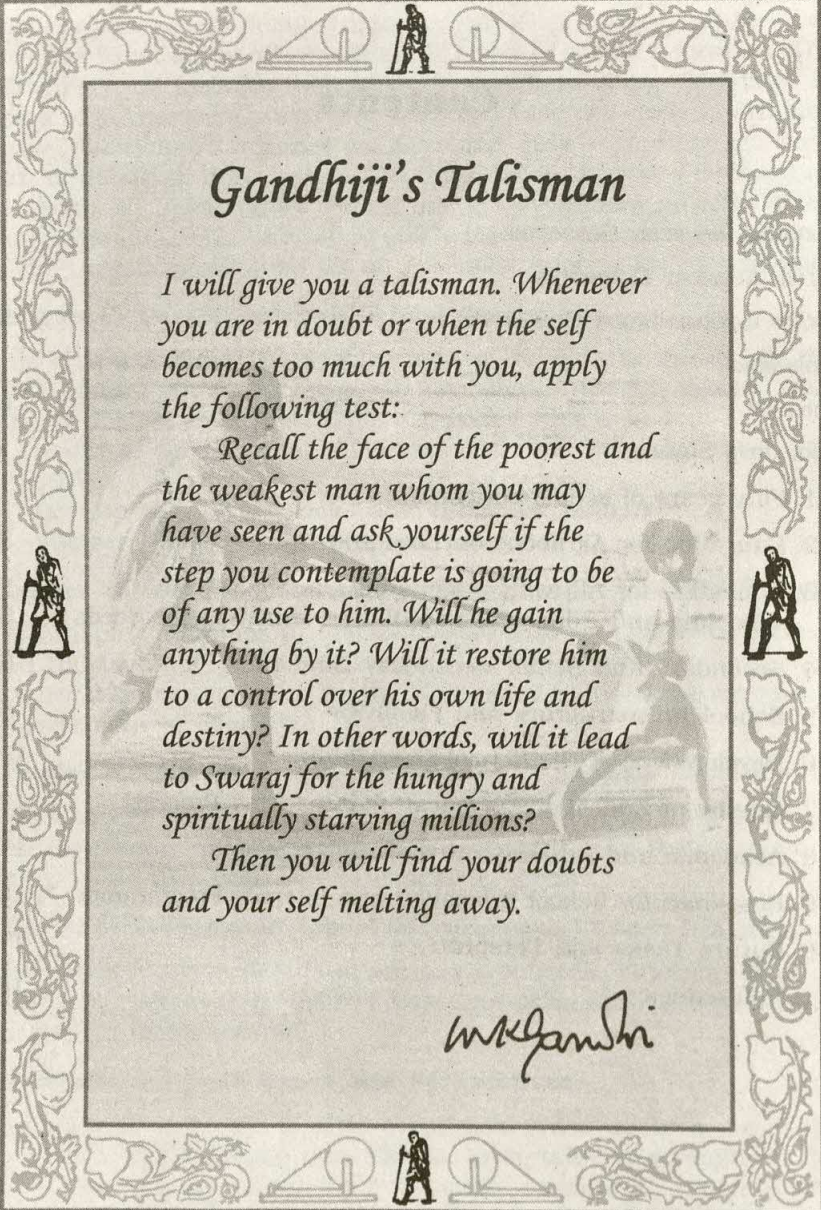
This chapter offers details of various resources, different kinds of assistance, schemes for SC/ST boys and girls, scholarships offered for further education, etc.

Chapter 10: Future Tasks and Perspectives

This chapter attempts to offer a tentative vision about some of the tasks which this State may like to undertake to strengthen the education system and provide it quality orientation. Some of the future perspectives relate to arresting dropout rate, strengthening vocational education, envisioning need based curriculum especially in terms of tourism, fisheries and oceanography.

Contents

Gandhiji's Talisman

I will give you a talisman. Whenever
you are in doubt or when the self
becomes too much with you, apply
the following test:
Recall the face of the poorest and
the weakest man whom you may
have seen and ask yourself if the
step you contemplate is going to be
of any use to him. Will he gain
anything by it? Will it restore him
to a control over his own life and
destiny? In other words, will it lead
to Swaraj for the hungry and
spiritually starving millions?
Then you will find your doubts
and your self melting away.

MKGandhi

Fifty Years of School Education

Goa today is the smallest state in the union of India. It became the 25th state on 30th May, 1987. Before 1987, Goa was Union Territory with Daman and Diu. Goa became free and was made an integral part of Indian Union on 19th December 1961, 15 years after India's independence on 15th August 1947.

Goa was under Portuguese rule for 450 years. The Portuguese were the first Europeans to arrive in India in the year 1510 and they were the last Europeans to depart from the subcontinent of India, in 1961.

P. D. Xavier stated in the book "Goa — A Social History" that "unlike other Europeans, the Portuguese were religious fanatics and as such in the early years of their conquest, they played all the tricks up their sleeve to transform the people in their domain into obedient and loyal Christian subjects of the Portuguese Crown. Though the Portuguese retreated after their efforts in **Malabar, Basian** and **Hooghly**, due to stiff resistance from the locals, they entered in Goa. But in the end they had to strike a compromise with the Hindus of the region. All the same, the long association with the Portuguese has left some indelible impressions in the **Goan society.**

Location

Goa is wedged between the state of Maharashtra and Karnataka at 15-47'-59" and 14-53'-57" North Latitude and 73-40'-54" and 74-20'-11" Longitude East of Greenwich. It is bounded on the West by the Arabian Sea and on the East by the high mountain ranges called Western Ghats. It stretches out to a length of 105 km from North to South and is about 60 km in width from East to West. It has a total area of 3722 Sq. km. with 443 villages and 15 towns.
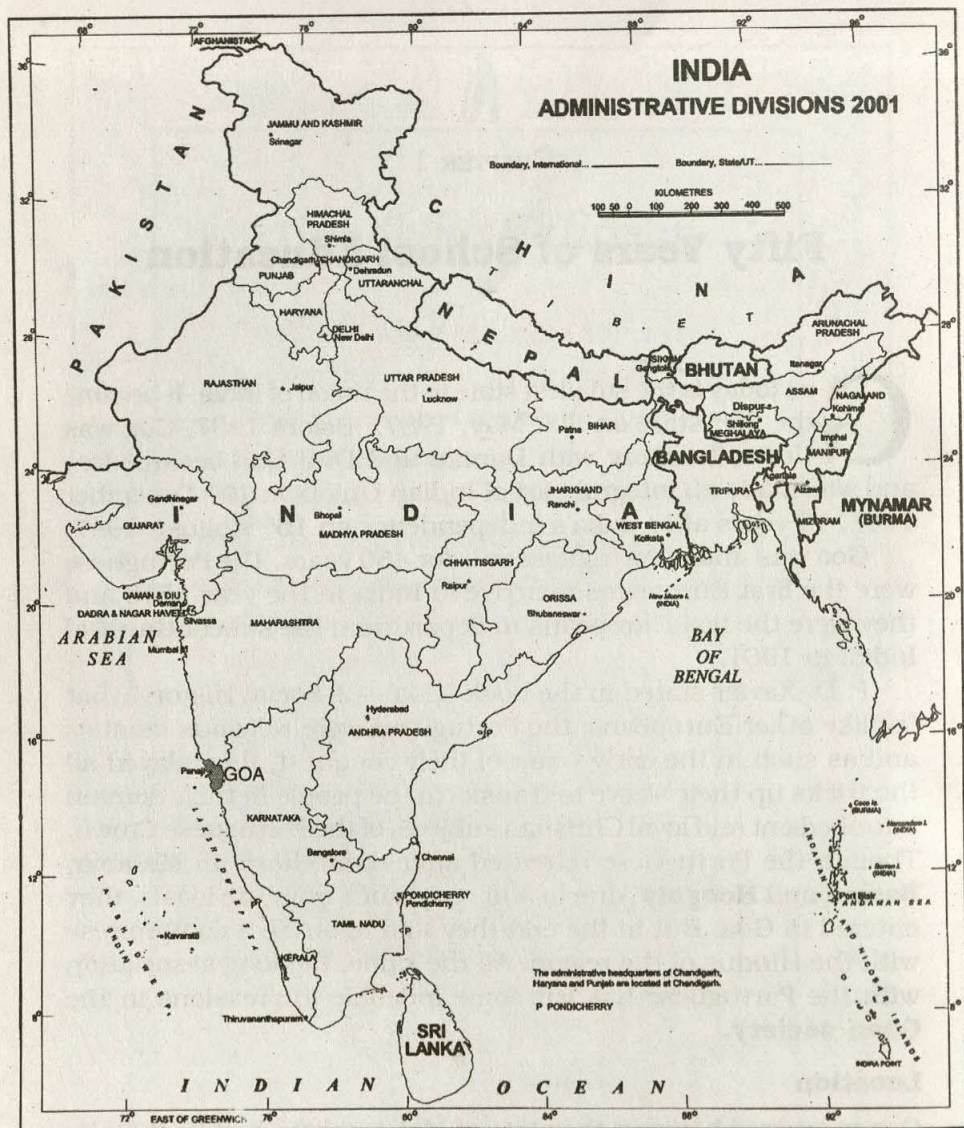
INDIA
ADMINISTRATIVE DIVISIONS 2001

Based upon Survey of India map with the permission of the Surveyor General of India.   © Government of India Copyright, 2001

The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line.

The interstate boundaries between Arunachal Pradesh, Assam and Meghalaya shown on this map are as interpreted from the North-Eastern Areas (Reorganisation) Act, 1971 but have yet to be verified.

Fig. 1.1 : *India : Location of Goa*

Natural Features

It is a land interspersed with plains, hills, valleys and rivers. The vast stretch of green fields, wooded forests, skirting palm groves, gurgling rivers, yarning creeks, blue skies above and surf laden waves below, the murky fisher folks and the sturdy Kunbis, all offer an exquisite vision with an unfading charm as bounteous gift of Nature.

Thus Goa is a small but beautiful and fertile land. It has a hilly terrain especially at the eastern side where lies the southern strip of the Sahyadri range. The terrain is dotted with numerous springs. It is intersected by a number of rivers flowing westwards which provide a network for internal waterways with barges carrying iron ore down the rivers, launches sailing up the rivers with eagerly returning villagers and ferries plying across the rivers laden with people and vehicles alike.

Historical Features

In ancient Sanskrit text, Goa was known as 'Gova Rashtra'—the Land of Cows. The name Goa figures in the mythology, ancient history and in literature. Legends say that Lord Parshuram created this land. Various dynasties that ruled Goa included Rashtrakuta, Bhojas, Kushanas, Shilaharas, Chalukyas, Bhahamanis, Vijaynagar Kings and Adil Shah.

The name Goa is spelt in various forms. Some of the names are, Goi, Goyem, and Goy. There are some more like Goem, Gomanchal, Gomant, Gove, Gomantak. The land is also known as Gondoneade (Golden Goa), Peldado Oriente (Pearl of the East), Romado Oriente (Rome of the East). Goa is now known as Green Land of the West for its scenic natural beauty, alluring beaches and the architectural splendors exhibited in the temples and churches.

Climate

Goa receives rains from the South-West monsoons from the month of June to September. The average rainfall in the state is about 3200 mm. The temperature in the State ranges normally from the minimum of 15.7 C. to the maximum of 35.6 C.

Demographic and Economic Features

The population of Goa was about 5 lakh in the year 1961, which has gone up to 13 lakh as per the Census 2001. The main

occupations are agriculture, mining, fishing, and industries. Iron and manganese are the main export commodities of the state.

Social and Political Features

Major communities of Goa are Hindus, Christians and Muslims. Goa has for many centuries been the meeting point of races, religions and cultures of the East and the West. A harmonious pattern of life has emerged in Goa out of these diverse strains. Indeed it is a rich and distinct pattern. The mutual respect shown by all the communities towards one another, their participation in freedom struggle and their secular outlook is an eloquent testimony to the much desired sense of communal harmony which is very essential for a healthy society today.

A Goan is warm by nature and tolerant, but at the same time he is religious. He respects his neighbour's creed very sincerely. That is why this territory has a long and an unbroken tradition of religious harmony. The Goans of different faiths take part in different festivals, which occur at unusual frequency during the year. All of them celebrate the festivals of Lord Ganesh, Diwali, Christmas, Easter and Id with enthusiasm.

Governance

Goa state has been divided into two districts for administrative purpose. These are North Goa and South Goa, each having a separate headquarter at Panaji and Margao respectively. The North Goa District has six Talukas namely Pedne, Bicholim, Sattari, Bardez, Tiswadi and Ponda. The South Goa District has five Talukas namely Salcette, Marmugoa, Quepem, Sanguem and Canacona. Panaji is the capital city of the state. It is a picturesque town on the left bank of the historic river Mandovi.

Goa has a legislative assembly of forty members. Three representatives are sent up to the Parliament as the Members of the Parliament (MPs) from Goa. Two of them are elected to the Lok Sabha while one of them is elected to the Rajya Sabha.

School Education in the State

Education in India, as elsewhere, was the handmaid of religion. The society was religious-minded. Goa was not an exception to this. The following passages depict the state of education during various phases of the Portuguese rule and after the Portuguese time.
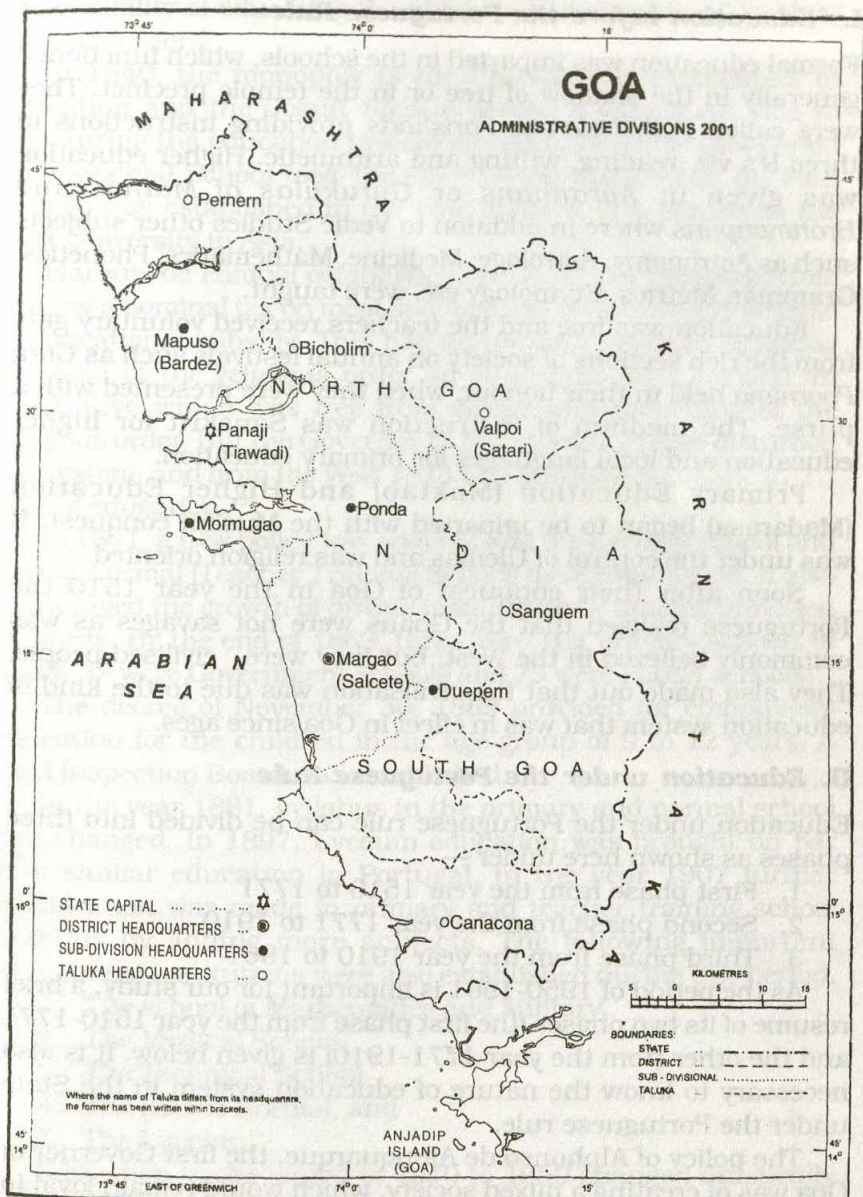
Based upon Survey of India map with the permission of the Surveyor General of India. © Government of India Copyright, 2001
The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line.

Fig. 1.2: *Map of Goa*

I. *Education before the Portuguese Rule*

Formal education was imparted in the schools, which functioned generally in the shadow of tree or in the temple precinct. They were called *Pathshalas* or *Parishads* providing instructions in three R's viz. reading, writing and arithmetic. Higher education was given in *Agranhans* or *Gurukulas of Mathas* and *Brahmanpuris* where in addition to Vedic Studies other subjects such as Astronomy, Astrology, Medicine, Mathematics, Phonetics, Grammar, Metrics, Etymology etc. were taught.

Education was free and the teachers received voluntary gifts from the rich sections of society on annual festivals such as *Guru Poornima* held in their honour, when they were presented with a purse. The medium of instruction was Sanskrit for higher education and local languages for primary education.

Primary Education (Maktab) and Higher Education (Madarasa) began to be imparted with the Muslim conquest. It was under the control of Ulemas and was religion oriented.

Soon after their conquest of Goa in the year 1510 the Portuguese realised that the Goans were not savages as was commonly believed in the West, but they were civilised people. They also made out that the civilisation was due to the kind of education system that was in effect in Goa since ages.

II. *Education under the Portuguese Rule*

Education under the Portuguese rule can be divided into three phases as shown here under —
1. First phase from the year 1510 to 1771
2. Second phase from the year 1771 to 1910
3. Third phase from the year 1910 to 1961

As the period of 1950-1961 is important for our study, a brief resume of its two phases (the first phase from the year 1510-1771 and the other from the year 1771-1910) is given below. It is also necessary to know the nature of education system in the State under the Portuguese rule.

The policy of Alphonso de Albuquarque, the first Governor of Goa was of creating a mixed society, which would remain loyal to Portugal forever. So he encouraged marriages between the Portuguese and the Goans and also established schools for educating and training the natives for Government Services. After Albuquerque. rulers along with religious preachers launched a vigorous policy of conversion of Goans to Catholicism. The

responsibility of educating the children was shouldered by their religious orders.

In 1540, the monopoly of the Church was established in education and the Jesuit Society played a significant role in structuring the education system for many years. In this period the Parochial School took the place of the *Pathshalas*. St. Paul College was established in the year 1542. It was known as the First University in Asia.

Marquis de Pombal established public school system in Goa. Levying a nominal tax on meat and tobacco, he created the scheme of educational subsidy. This had an overall impact on breaking the hold of the religious order on education and provided an alternative which was free from rigour and preaching of the religious order. But the Governor D. Manuel de Camase disturbed the system, and from the year 1823 till 1836 little was done in the field of education.

In 1841, a new policy was adopted and the Lyceum school and Escola Normal (Teacher Training School) were established. It also encouraged the growth of private institutions by making provision of grants. By the end of 1869, there were 102 primary schools of which 27 were Government schools and 75 were Parish schools.

The decree of November 30, 1869 provided for compulsory education for the children in the age group of 9 to 12 years. A local Inspection Board was established.

In the year 1881, syllabus in the primary and normal school was changed. In 1897, Lyceum education was brought on par with similar education in Portugal. In the year 1907 further modification was made in primary and teacher training school syllabus by adding more subjects. The following important educational institutions were also established during this period.

1. The school of Mathematics and Military
2. The Medical School
3. The Technical School
4. The Escola Normal, and
5. The Lyceum.

Education in the period of 1910 to 1950 changed drastically due the following political movements that started in the State.

1. In the year 1912, Portuguese Monarchy came to an end followed by Proclamation of Republic of Portuguese.
2. The Fascist regime under leadership of Dr. Antonio Olivier Salazar had its rise in 1926.

3.　Emergence of the Indian Nationalism in Goa in the year 1932.

With the proclamation of the Republic, Roman Catholicism came to an end as the State Religion and the Hindus were given equal political rights. Goa was also given limited political autonomy by 1917. The republican period provided a great boost to educational activities.

Many private schools in Marathi and English medium were started in all parts of the state. The growth and expansion of primary schools was slow in the beginning but later it gained rapid momentum. Quality of education also improved considerably in this period. This rapid increase in the number of primary schools could be an outcome of the Nationalist Movement. The Portuguese were eager to please the Goan masses because of the rising tide of nationalism that was threatening the Portuguese control over Goa. So the Government took measures to expand primary education. They encouraged opening of private schools to impart primary education on the condition that the medium of instruction should remain Portuguese.

In respect of secondary education, the first English medium school was established in 1890 at Arpora (Bardez Taluka). Syllabus of Bombay University was followed in this school. The first batch of students for matriculation was sent in the year 1901. Thereafter, many English medium schools affiliated to Bombay University were established. Inspection of these schools was carried out by the officers of the Bombay University for monitoring the standard of education in these schools.

The Portuguese government interpreted the existence of such English medium schools as surrender to sovereignty in educational matters and tried to act a new enterprise. But they were fully aware of the fact that these schools were providing education of the existing values for the Goan emigrants. They could not be abolished immediately. The Portuguese government followed a *go-slow policy* which restricted opening of such schools only to missionaries. They also began to create technical, commerce and multipurpose schools so that demographic access of Goa could peacefully be diverted to Portuguese possessions in Africa while another important factor in opening Marathi and English Medium schools was to make the Goans feel a spiritual unity with the rest of India so that the control of Portuguese remained unaffected.

The growing national consciousness in India also played a significant role in this development.

The list of some educational institutions opened in this period is given below:

1908 — Dnyanaprasarak Mandal, Mapusa

1908 — Mustifund Sanstha, Panaji

1911 — Saraswat Vidyalaya, Mapusa

1911 — Goa Vidyaprasarak Mandal, Ponda

1913 — Shri Damodar Vidyalaya, Margao

1913 — Shri Shantadurga Vidyalaya, Kumbharjuve

1933 — Samaj Seva Sangh, Margao.

III. *Education from 1950 – 1961*

As per the Census of 1950, the population of Portuguese India was about 6 lakhs. About 80,000 children were of the school going age between 7 to 13 years. The education of these children was important. The urgency of educating these children is emphatically articulated in the Preface of the Legislation Diploma passed by the Portuguese Government in 1958. It states:

At present only 301 primary teachers in Government Primary Schools are appointed. These teachers can teach at the most 15000 students only. It is not possible to expand the number of schools at a stroke to the extent needed. The only solution would therefore be to encourage the expansion of existing private primary schools along with the government primary schools.

The primary education in Portuguese medium was made compulsory in October, 1958 for all the children in the age group of 7 to 13. They were required to be enrolled in the nearest school within a radius of 3 km from their residence. Their parents were to be penalised with a fine on failure to enroll their child in the school. Government also conducted a special census of the children of the school-going age. Even definite measures were contemplated to achieve the goal of compulsory education, such as :

1. Opening of Portuguese Medium Private Primary Schools.

2. The Private Primary Schools, Primary section of Private Secondary Schools with other than Portuguese Medium (i.e. Marathi/ English) were recognised for the purpose of Compulsory Primary Education. However, these schools were required to maintain a Portuguese class to impart first stage elementary education (i.e., primeiro grau). These

schools were awarded grants on the basis of student enrolment and at flat rate for the maintenance of buildings.

3. The qualifications for the post of the teacher were also relaxed. The requirement to pass seventh year of lyceum was relaxed to fifth year of lyceum. Salary paid was 50 per cent less than that of qualified teacher. Each such teacher had to pass an aptitude test.

In fact, majority of Goan people were educating their children in Marathi medium schools up to IV and in some cases up to VII. Later, these children entered English or Portuguese medium schools for higher education. All the schools were running without any official help and grant, but with the donation from the people.

In the year 1910, the literacy rate was 10 per cent. It was higher in the Talukas of Nova Conquests, where Hindu population was quick at learning to read and write Marathi, whereas the Christians learned Portuguese in schools. Vassala e Silva, the last Governor General had observed in his report that it was more difficult to learn Portuguese for the Christians as it was not spoken by the most of them. This report, however, was not published. Pundalik Gaitonde has referred to the said report in his autobiography *The Liberation of Goa — A Participant's View of History.* The Governor General listed the villages in the state after taking the charge of Goa in the year 1958. The extract is given below.

General Vassala e Silva shows great surprise at what he saw all over Goa in his visits to the villages and various institutions. In the first place he found that there were very few Portuguese schools, while there was a large number of school affiliated to the Bombay Board of Education. He could communicate with the school children in English only. He was very disagreeably surprised at the existence of Marathi schools in every village. He found that these children were supposed to learn Marathi at a very early age, before attending any Portuguese or English school and worst still, the alphabet used was Devanagari. He was convinced that the real cause of Goan nationalism was this non-European alphabet and the textbooks informing them about India and Indian history. He was told that Marathi language was related to the Hindu religion and that, therefore, all Hindu children had to study this language. He had, somehow, been led to believe that language of Goa was Konkani and that once Marathi was eliminated and the Roman

replaced Konkani's Devnagari alphabet, the anti-Portuguese tendencies of majority of Goans could be nipped in the bud.

The Governor General was also shocked to find that the medium of instruction was English and thinking, speaking and writing were carried out in English resulting in the instinctive concept that, Portuguese was a foreign language and was needed only for official business. There was a total English environment offending the national language — Portuguese – and deeply hurting the pride of Portuguese who visited them. They felt that a Marathi school gives us an impression of the 'Absence of Portugal' and English school gives us impression of the 'Rejection of Portugal'. So, the Governor General opined in his report that this situation was to be changed by taking appropriate measures like introducing the Latin alphabet and preparing textbooks in Konkani. Distribution of textbooks prepared by the Portuguese Government in Portuguese, English and Marathi would be free. The people of Goa still continued their education as per their wish up to the time of liberation in the year 1961.

Education after Liberation

Liberation of Goa, Daman and Diu from Portuguese rule on 19 December, 1961 and its integration as Union Territory of Indian Union opened doors of development in all the fields of life. People were enthusiastic and were eager to support the developmental programmes. The first elected popular government tried to use this enthusiasm and the support of the people for all round development of the union territory. The development in educational field within the period of ten years after liberation was so impressive that this territory ranked fourth in the field of literacy in the whole country. The expansion and coverage in all the areas of literacy, Primary Education, Secondary Education, and Higher Secondary Education is noteworthy and a review of the same is very interesting, which is given in the following paragraphs.

Literacy

Literacy rate broadly indicates the quality of the population. The expansion of Primary Education and Adult Education Programmes took Goa, Daman and Diu (and now Goa as a State) to the fourth/fifth rank in the country since 1961. The literacy rate at the time of liberation was only 39 per cent which increased to 82.32 per cent as per Census of 2001. In July 1992, Total Literacy

Campaign (TLC) was launched. But it could not get cent per cent result. Evaluation of the programmes was done by the Tata Institute of Social Sciences under the leadership of Dr Denzel Saldhana in October, 1993. Both approaches — Adult Education Centres and Each One Teach One were used. Three Konkani primers were developed under this campaign. The primers were Raat Shala Part I, II and III and Lok Shala Part I in Konkani. The Lok Shala was used in post-literacy programme. Jana Shikshan Nilayams were established for continuous education programme under government and non-government schemes of mini JSNS with grant-in-aids. However, after 1993 the adult education programmes did not continue. Mini JSNS under grant-in-aid still exists.

The following table gives details of the literacy position in ten years duration after liberation.

Table 1.1 : Percentage of Literacy in the State — First Ten Years of Liberation

District	1960-61 Before Liberation			1970-71 Ten Years After Liberation		
	Persons	Male	Female	Persons	Male	Female
Goa, Daman and Diu	30.75	39.04	20.02	44.75	54.31	35.00
Goa	31.23	39.28	23.58	45.31	54.65	35.79
Daman	21.70	32.37	11.76	39.68	51.60	28.26
Diu	25.11	35.14	17.72	34.11	45.91	24.42

It is generally observed that the original population of Goa was cent per cent literate. The resident illiteracy is because of migrated population entering the State for construction and mining works.

Elementary Education

As reported earlier, due to sudden and unprecedented enthusiasm of the people, there was a colossal expansion of primary education in the year 1962-63. Salient features of primary education after liberation can be listed as below:

❖ Change of medium of instruction from Portuguese to the mother tongue which could be any of the fourteen languages

of the Eighth Schedule of the Constitution as per the choice of the guardians. Accordingly primary schools were opened in the media like Marathi, Konkani, Gujarati, Kannada, Hindi, Urdu and English. It is notable that majority of these schools imparted education in the Marathi medium.

❖ Education was free.

❖ The State Government ran majority of the schools. Teachers working in Government. Schools got Government scales.

❖ There was relaxation in the rules of recruitment and employment for the posts of teachers.

❖ Private primary schools were closed due to inadequate funds and desire of teachers for better wages and working conditions.

The following table gives a clear idea about the sudden and unprecedented expansion of primary education in the State.

Table 1.2: Expansion of Primary Education

Type of Schools	1961-62	1962-63	1963-64
Government Primary Schools	176	601	618
Private Primary Schools	300	272	150
Government Teachers	558	1395	1527
Private Teachers	648	200	200
Enrolment in Government Schools	17028	55020	57341
Enrolment in Private Schools	24273	16275	10301

In the year 1968-69, the Government Primary Schools increased to 862, as against only 65 private primary schools. The enrolment in Government Primary Schools was 75,497 and 4,203 students were in private schools in that year.

In 1965, as per the Report of the Second All India Educational Survey (conducted for the first time in Goa), 89 per cent of child population in rural areas was served with the facility of Primary Education with a school in own village and at least at a distance of half a mile in the hamlet. The corresponding percentage for urban areas was 100 per cent. Thus the territory reached a stage of fulfilling the constitutional directives of compulsory education for all the children in the age group of 6-14 in the year 1968.

The problems faced in respect of primary education in the ten years of liberation were:

1. Quality of Education
2. Teacher Training
3. School Buildings and Equipments
4. Residential Quarters for Teachers
5. Problem of Wastage and Stagnation.

The course of progress in primary education faced new changes in 1980 along with the rest of India as the state accepted the UNICEF assisted projects. This enabled the state to take up various programmes like Improvement of Science Education, Developmental Activities in Community Education and Participation, etc.

The state had an opportunity to develop and implement its curriculum under the Project II — Primary Education Curriculum Renewal (PECR). Under this project the state could bring out its own package of teaching-learning materials. This was a unique programme because the state got a rich experience of this kind as the task involved process of developing and trying out materials before finalisation and implementation.

Thus the state opened up new horizons while it joined hands with the central agencies and could offer a decisive turn to its education system towards development. This replaced the curriculum and teaching material of Maharashtra State Textbook Bureau which was followed by the State in all its Primary Schools until 1985. *No Detention* policy up to standard III was adopted as per the guidelines of the Government of India. Under the NPE 1986 and POA 1992, Operation Black Board Scheme was implemented in all the Government Primary Schools and was extended to all Government Middle Schools in the year 1992.

The following special schemes were also implemented in all Government Primary Schools.

1. Construction of additional classrooms with toilet and drinking water facility.
2. Introduction of pre-school education.
3. Payment of grants to Non-government Schools.
4. Supply of free textbooks, notebooks to economically backward students.
5. Supply of uniforms, raincoats, umbrellas to economically backward students.
6. Incentive scholarships to meritorious students at elementary stage.

7. Opportunity cost to schedule caste students.
8. Encouragement to girl students by paying Rs 200/- per girl child, to those whose income of the parents was less than Rs 25000/- p.a.
9. In-service teacher training under SOPT for all the teachers of Primary Schools.

Secondary Education

The rapid expansion of Primary Education was followed in proportionate growth in Secondary Education. There was no middle stage/level at the time of the Portuguese rule. Same trend was continued after liberation. The State Government initiated opening of some middle schools in rural areas in the beginning. The following table gives information about the expansion of Secondary Education in the state.

Table 1.3 : Expansion of Secondary Education

Schools	1961-62	1965-66	1968-69
Number of the Schools	95 (including Lyceum)	192 Non-government; 77 Government (Including Middle School)	193 Non-government; 201 Government (Including Middle School)
Number of the Students	1181	36375	60779

The Lyceum at Panaji was converted into Government Higher Secondary School with English as the medium of instruction. It was affiliated to Central Board of Secondary Education, Delhi. This school offered education in arts and science streams. The commerce stream was started in the year 1965-66. But it soon closed. With the inception of Goa Board of Secondary and Higher Secondary Education, in the year 1975, the school switched over to courses started by the Board.

Meanwhile Secondary Schools with Portuguese medium under Lyceum pattern were either closed or converted into English medium high schools affiliated to Poona Board of Secondary Education, Poona.

The Government adopted the policy of allotting secondary education to Non-government Organisations with financial aid under grant-in-aids scheme on the line of Maharashtra State with rules and regulations prevailing at that time. But, at the same

time, where non-government organisations did not take up the task, Government opened its high schools. Accordingly in the year 1963-64, eleven schools were opened with Marathi as medium of instruction. Again ten more Secondary Schools came up in the year 1966-67. The policy of encouraging Non-government organisations for opening Secondary and Higher Secondary Schools still continues. At present majority of Secondary Schools is imparting education in English. A few of them have other media such as Marathi, Urdu and Kannada.

Prior to 1975, when Goa Board of Secondary and Higher Secondary Education started functioning the Secondary Schools in Goa were affiliated to the SSC Board of Pune while those in Daman and Diu to the Gujarat Board of Secondary Education, Ahmedabad. The pattern of was followed. In 1975-76 the new pattern of 10+2+3 was adopted as per Kothari Commission recommendations.

In the year 1974 the Goa Board of Secondary and Higher Secondary Education took a decision to introduce NCERT curriculum and textbooks for standard VIII to XII. The examination pattern as per the NCERT guidelines is followed in all the schools of the State. The Board has decided to discontinue the practice of publishing merit list of students passing SSC and HSC Examination from 2001.

The rate of grants was increased from 50 to 66.5 per cent on the admissible expenditure. Later from 1984, it was raised to 100 per cent on salaries. The Goa, Daman and Diu Education Act of 1984 replaced grant-in-aids. Education rules were framed in 1986. The building grants introduced in 1964, (25 per cent in the beginning) was increased to 50 per cent. Presently, for construction of school building, grants of Rs five lakh are given to schools besides the scheme of offering loan up to Rs 10 lakh. Special equipment grant for laboratory at the rate of 100 per cent of admissible expenditure to a maximum of Rs 2000 was also paid in the year 1964.

The problem of dropout rate in the Secondary Education is serious and the Planning Commission of India has asked the Education Department to adopt suitable measures to check it. As per the statistics prepared by the Statistics Section of the Directorate of Education.

The dropout rate in the years from 1991-92 to 1999-2000 is given below:

Class	Year	General		
		Boys	Girls	Average
	1991-92	51.40	54.48	52.94
	1992-93	48.40	49.34	48.87
	1993-94	40.46	41.92	41.44
	1994-95	41.67	41.53	41.06
I-X	1995-96	45.76	45.74	45.75
	1996-97	43.49	43.27	43.38
	1997-98	46.49	46.71	48.10
	1998-99	41.69	42.45	42.07
	1999-2000	43.22	42.41	42.81

More details of the dropout rate in respect of the children at all stages of school education and those belonging to SC/ST category are cited in the relevant chapter of this report.

Computer Education is introduced at the Secondary Education Stage. Initially in 1984-85, the CLASS Project of Central Government was implemented in ten Higher Secondary Schools and two Secondary Schools. In the year 1995-96, fifty-eight schools were brought under this scheme and in the year 1997-98, one hundred twenty-three secondary schools were covered. ICS New Delhi extended its help in introducing Computer Education in the schools in the State.

The Member of Parliament Local and Development (MPLAD) Scheme has enabled the Government to supply computers to different schools in the state. In the year 2001, computers were provided to almost all the schools. Pre-vocational courses are also introduced in the area of technical education, agriculture and commerce in ten Secondary Schools from the year 1999 to 2000 under grants-in-aids scheme of Vocational Education of the Government of India.

Special mention deserves to be made of the introduction of Theater Art as an optional subject in 1998-99 in selected Secondary Schools. The Indian Foundation for Art, Bangalore, Kala Academy, Panaji, Goa Board of Secondary and Higher Secondary Education and Directorate of Education has jointly prepared the scheme and each agency is playing its role in

implementation of this subject for standard VIII. The course is designed to reduce rote learning and to encourage joyful and lifelong learning.

A well-knit network of School Complex Scheme was developed by the Directorate of Education to improve the quality of education. To start with, it was limited to Government Secondary Schools. School Complex Scheme existed in 1970-1980 for Primary Schools. The scheme underwent a process of strengthening in the year 1992 and all the schools from Primary to Higher Secondary Schools were brought under this network. The rationale of constituting the School Complexes was sharing and exchanging resources, (including human resources), and breaking isolation of the schools functioning in local vicinity. Special grant of Rs 5,000 for conducting activities for improving quality of education is sanctioned to each school complex. All officers of the Directorate are involved actively in this scheme.

Higher Secondary Education

Lyceum, the Higher Secondary School providing instruction in Portuguese medium was the only institution for Post Matric studies in the general stream. Enrolment with this Portuguese medium institution was 900 in the year 1961.

Esclola Medica and Escola Pharmaceutica were other institutions that catered to educational facilities. Escola Normala was a primary teachers' training institution.

In the year 1976-77, Government of Goa appointed a committee under the chairmanship of Dr D.B. Wagh, the Director of Postgraduate Centre of Bombay University, for starting Higher Secondary Courses. Following this, 13 Higher Secondary Schools were started. eight of these were opened in colleges and the Government opened two at Pedne and Canacona each. Three private Higher Secondary Schools were opened, one each at Bicholim, Panaj and Curchorem .

The Goa Board of Secondary and Secondary Education has introduced courses for vocational education at +2 stage. A special committee was appointed and detailed report for starting vocational courses was prepared. Attempts at operationalisation of education at +2 stage got support in 1988-89, when Central Assistance was made available for the scheme in 39 Higher Secondary Schools (32 non-government Higher Secondary Schools and 7 Government Higher Secondary

Schools). One hundred three vocational education sections and 14 different courses were introduced.

The Government of India set up a target of 25 per cent diversion of students of Secondary Schools passing standard X to vocational stream in Higher Secondary Schools. However 18 per cent students were enrolled in vocational stream in the state. There are 81 Higher Secondary Schools in the state at present.

Teacher Education

There was one institution for the pre-service training of teachers. The 'Escola Normal' was renamed as Government Teachers' Training College. It was shifted to Porvorim after functioning at Panaji for some years. Two more institutions for training of Primary Teachers were opened at Margao giving training in Marathi and English medium. Nirmala Institute of Education was established in the year 1964 to impart training to Secondary School Teachers. Later, in 1993, GVM College of Education was established at Ponda. The teacher education institutions are imparting training in English medium

Education of the Disabled Children

The education of disabled children is undertaken by the non-government organisations in this state except one school at Porvorim. Caritos at Old Goa is the first Institute of this kind. Gujarati Samaj School, Margao and Lokvishwas Pratishthan's Late Meenatai B. Thakarey School for Deaf and Dumb are engaged in the task of educating disabled children. These institutions impart education up to middle school stage. Directorate of Education tried to educate such children in the normal schools with integrated approach as suggested by NCERT. People's High School, Panaji has taken up the task. Still, much remains to be done for the education of these children in the State.

Continuing Education — Library and Reading Rooms

At the time of liberation, there was one State Library at Panaji. Of course, libraries owned by private organisations were functioning at Mapusa, Margao, Panaji and in other places.

The Government opened five Taluka Libraries at Valpoi, Canacona, Curchorem, Bicholi and Sanguem. Village Libraries were opened where teachers were posted as teacher-cum-librarians. Jr. Librarians were also kept in charge of village libraries. In addition to these there are some libraries run by Non-government Organisations. At present there are 156 libraries apart from the State Library. There are five Government Taluka Libraries, 66 Government Village Libraries and 85 libraries run by non-government organisations.

Organisational Structure of the Existing Education System

Before liberation, in the year 1957, there was Directorate of Public Instruction and Health. In the year 1960, separate Directorate of Public Instruction was created. After Liberation, the Directorate of Education came into existence and was strengthened with officers ranking from the Director of Education to the Assistant District Educational Inspectors (ADEI) at eleven Taluka Offices in Goa and two in Daman and Diu. There were also Zonal Officers and Deputy Education Officers (DEO) at Zonal Offices at Panaji, Mapusa and Margao. Gradually the Directorate of Education installed several cells to smoothen its administrative and inspectoral functions

In the year 1970, Education Inspector and Deputy Inspector were renamed as Assistant Director of Education and Deputy Education Officer respectively. In the year 1981, the Zonal officer's post was upgraded to the post of Assistant Director of Education. More posts of Deputy Director and Assistant Directors were also created in the year 1975 after the establishment of Goa Board of Secondary and Higher Secondary Education and the State Institute of Education. With the establishment of District Institute of Education and Training in the year 1990, the Principal's post was ranked equivalent to that of Deputy Director of Education.

The posts of Environment Education Officer and Vocational Education Officer were also created in 1989. The posts were equivalent to the post of Deputy Education Officer or the Principal of Higher Secondary School. The organisational structure of the office of the Directorate of Education and its other offices is given later in this report.

Many of the officers working in the various capacities in different offices of the Directorate hold equal ranks as shown in the Table 1.5.

Table 1.5 : Equivalence of Different Officers of the Directorate of Education and in Other Offices of the Directorate of Education

No.	Placement	Designation	Equivalent Post with Nomenclature	Place of Functioning
1.	Directorate of Education	Director of Education	—	—
2.	—do—	Dy. Director of Education	1. Director of State Institute of Education 2. Chairman, Goa Board of Secondary and Higher Secondary Education 3. Principal, District Institute of Education and Training	SIE-porvorim GBSHSE. Porvorim DIET, Porvorim
3.	Directorate of Education and North /Central /South Zone of Education	Assistant Director of Education	Secretary, Goa Board of Secondary and Higher Secondary Education	GBSHSE. Porvorim
4.	Directorate of Education and North/ Central/ South Zone of Education	Dy. Education Officer	1. Principal of Govt. Higher Secondary School 2. Vocational Education Officer 3. Environment Education Officer 4. Joint Secretary of GBSHSE	Govt Hr. Sec. Schools Directorate of Education Directorate of Education GBSHSE Porvorim

The officers functioning in the Taluka Offices of Education are designated as Assistant District Education Inspector who rank equal to the Higher Secondary School Teachers (Grade I teachers) and Headmasters of the Middle Schools.

State Level Policy and State Level Commissions: Major Recommendations

Before liberation there were parallel English and Marathi medium schools using the curriculum and textbooks of Bombay University and Secondary Board of Education, Pune. The Portuguese medium

schools were using syllabus and textbooks prescribed by the Portuguese Government.

After liberation, the Government of India appointed a committee under the chairmanship of Shri B.N. Jha, the then Vice-chancellor of Delhi University to make a thorough review of the educational system in Goa, Daman and Diu and to make recommendations to bring it at par with the system generally prevailing in the rest of India. This was the first committee.

Up to the year 2000, various committees were appointed by the Government of Goa from time to time to review the education system and to suggest policy for restructuring education in the State. The recommendations of National Education Commission are also implemented by the State. The benefit of centrally sponsored schemes is also availed by the Government of Goa from time to time. The brief review of the committees appointed in the state is presented here below.

B.N. Jha Committee

The committee was appointed in April 1962. It submitted its report by June 1962. Prof. Armando Menezes, Head of the Department of English, Karnataka University, Dharwad was on the committee. Smt Vijaya Muley, Assistant Education Advisor, Ministry of Education, Govt. of India was its member secretary.

Government of India approved the committee's recommendations in respect of School Education on 25th June 1962.

1. The pattern of School Education in Goa should be five years of Primary School, three years of Middle School and three years of Secondary School in accordance with general pattern in other Union Territories.

2. Education should be free and compulsory for the children in the age group of 6-11.

3. The age of entry should be 6 plus.

4. The school hours in primary should be 5 ½ to 6 hours. (In pre-liberation period it was 4 hours).

5. The medium of instruction in primary school should be the mother tongue or any one language of the eighth schedule of the Constitution, with the choice being left to the guardians.

6. No religious instruction should be given in any government school but moral instruction or giving information about

the basic principles of all religions should not be debarred. In private schools religious education, if any, should be given outside the school hours with the written permission of the guardians concerned.

7. The teaching of Konkani, if selected, should be in Devanagari script.

8. The opening of school division with a particular language as medium of instruction should be subject to a minimum of 20 students.

9. Regarding syllabus of Primary School during the transitory period, it was recommended that the syllabi as prescribed by the former government were to be continued except Portuguese History and Geography which were to be replaced by History and Geography of India with special emphasis on Goa.

10. Regarding the languages, besides the language chosen as the medium of instruction, another language from the eighth schedule of the Constitution was to be taken in standard III and IV. English, Portuguese or Hindi, if not already taken, could also be opted as transitory measures for the first three years. As for the Secondary Education, the Committee also recommended that the ultimate pattern should be of the Higher Secondary type similar to that prevailing in Delhi and that the Secondary School should be affiliated to the Central Board of Secondary Education (CBSE), New Delhi. Changes in syllabi were accordingly prescribed in order to upgrade the course and transitory arrangements were recommended separately for Lyceum Secondary School with Portuguese as the medium of instruction and for English and Marathi medium schools which were allowed to prepare students as before for the SSC Examination of the Board at Pune for next four years. The Lyceum and other Portuguese medium Secondary Schools following the lyceum pattern had also to change the medium gradually from Portuguese to English.

11. Some broad principles were suggested on which rules for grant-in-aids for Non-government Primary and Secondary Schools would be framed by the Education Department.

12. Regarding technical schools in the State, the Committee observed that their syllabi were more or less similar to those of Junior Technical Schools existing elsewhere in the country. The committee suggested that experts of Ministry

of Scientific Research and Cultural Affairs, New Delhi should study the problem of their conversion into Junior Technical Schools in detail.

13. The Committee asked to change the medium of instruction of Escola Normal immediately into the local language. It viewed that an interim arrangement of English as medium of instruction could be permitted if candidates with high school or Matriculate Certificate were admitted. But use of local language should be progressively done in due course of time.

14. The Committee asked to screen the textbooks carefully and to delete lessons containing pro-Portuguese propaganda and sectarian references.

15. The committee consisting of Officers of Education Department, local teachers and educationists may be appointed to prepare syllabi for Primary and Middle Schools integrated in new education pattern for the approval of the government and make deletions in the existing books along the line of suggestions.

In accordance with the recommendations of the Jha committee, a committee was set up under the chairmanship of the Director of Education, Dr Filipe A. Pinto with the following members:

Dr Peter Mendonza	Teacher of Loyola High School,
Fr. Athaide Lobo	Margao Representative of Diocesan School, Panaji
Shri H.R. Prabhu,	Headmaster of Prathamik Marathi Vidyalaya, Mapusa
Shri Xec Xerfuddin	Headmaster, Government Portuguese-Urdu Primary School, Bicholim
Prof. Vinayak S. Sheldekar	Director, Institute Abade Faria (Private Portuguese Secondary School, Margao
Shri Morto Kamat	Headmaster, G.P.S. Ponda
Shri Mukund Kelekar	Priol Educationist,
Prof. Pandurang S. Varde	National Lyceum as Member Secretary

The Committee screened the textbooks in all languages and recommended the deletion of all the matter centering pro-Portuguese propaganda and sectarian references. It also prepared

new syllabi for Primary and Middle Schools. The Committee worked hard to complete the task within the stipulated time. It received the help of officers of the Education Department under the guidance of Dr B.N. Jha, the Chairperson and Smt Vijaya Muley, the Member Secretary of Committee. The new syllabi and list of textbooks were submitted to Government for approval in the month of July, 1962.

2. Dr D.B. Wagh Committee

The Committee for starting Higher Secondary classes in the Union Territory of Goa, Daman and Diu was appointed by Government in the year 1973 on 24th November, under the Chairmanship of Dr D.B. Wagh, the Director of Postgraduate Centre of Bombay University.

The other members of the Committee were:

1. Principal D.J. Malkarnekar, Chowgule College, Margao
2. Principal N. Pereira, St.Xavier College, Mapusa
3. Shri R.A. Tople, Principal, Janata High School, Mapusa
4. Shri G.R. Sardesai, Principal, Progress High School, Panaji
5. Shri D.M. Naik, Cuncolim
6. Principal M.S. Kamat, MES College, Vasco
7. Principal D.R. Karnure, Govt. Polytechnic, Panaji
8. Father G. Pinto, Panaji
9. Shri B. da Cruz, Dy. Director of Education was the Member Secretary

The Committee submitted its report to the Government on April 26, 1974. The Committee considered the observations of the Education Commission for its recommendations. The salient features of the report are given below:

1. One out of five Secondary Schools may be upgraded into a Higher Secondary School.
2. Higher Secondary Stage in no case should be considered as a part of the college stage. The institutional pattern, therefore, should be of the school pattern: smaller classes, closer supervision, intimate teacher-student contact and more tutorial work.
3. Higher Secondary Stage should be the part of Secondary Schools.
4. The Higher Secondary Stage is likely to prove to be another natural terminal point in general education. Hence the course at this stage must have terminal aspect — an end in itself in one respect and preparation for higher course in the other. Like in Maharashtra, a Higher Secondary School can be opened for an average area of 20-25 square kilometres.

The Committee also gave details of facilities to be provided in schools, such as :

Sr. No.	Facility Item	No. of Items
1.	Classroom of 720 sq. ft.	6
2.	Tuition room of 360 sq. ft.	6
3.	Library and reading room 2000 sq.ft.	1
4.	Laboratories each of 750 sq.ft.	3
5.	Store room, record room, canteen, office, staff room etc.	

The Committee also recommended starting of Vocational Courses. Accordingly the following Vocational Courses were started:

1. Technology in Agriculture
2. A Course in Forestry
3. Fishery
4. Office Restore
5. Librarianship
6. Home Science
7. Washing
8. Teaching
9. Typing and Shorthand Secretarial Practice.

3. Subcommittee on School Education

The Planning Board of Goa had appointed two subcommittees on School Education in 1996 and 2000. Here are a few major recommendations made by the Subcommittee.

A. *The recommendations of the expert group on restructuring of School Education/Human Resource Development [1995-96]:*

School Timing – Full day school from 10.00 to 5.00 with 10 minutes mid-session break and 40 minutes lunch break may be implemented immediately.

Admission to standard I – At the age of 6 plus may be adhered to.

The Planning Board appointed the Subcommittee on School Education with the following members on April 3, 2000.

1. Prof. B.S. Sonde, Vice-chancellor of Goa University
2. Principal M.S. Kamat, Ex Principal, MES College, Vasco
3. Gen (Rtd.) Sunit Rodrigues, Porvorim
4. Prof. L.V. Joshi, Mumbai (Ex Officer of NIO)
5. Director of Education — Member Secretary

B. *The Committee submitted its Draft Report in July, 2000.*
   The terms of reference for the subcommittee were as
   following :

   To study the policy issues for the development of education,
   quality upgradation, skill formation, and Information
   Technology.

   To make specific recommendations which are practical and
   can be implemented.

   Other recommendations of the Subcommittees are given in the
following passages. These recommendations are classified as per
the terms of reference.

Recommendations

Standard and Quality of Education

1.1. *Primary and Middle School Levels*

An expert committee of educationists should be constituted to
look into deficiencies in the Primary and Middle School Education
to put it in tune with the National Policy of Education-1986. The
Committee also recommended speedy measures in respect of:

   ❖ Integration of Primary and Middle School Education with
      Secondary and Higher Secondary education.

   ❖ Upgrading the syllabus to the level of NCERT syllabus.

   ❖ Preparation of textbooks for the upgraded syllabus
      translating NCERT textbooks into Konkani textbooks for
      use in the state.

   ❖ Introduction of English at an earlier level than at present.

   ❖ Providing deferential timing for school hours in urban and
      rural areas to minimise dropout rate particularly in rural
      areas.

   ❖ Adoption of the National pattern for Primary and Middle
      School Stage.

   The Committee asked to invite reputed trusts, societies with
proven record to set up model schools of Primary and Middle
School Stage in selected localities of the state, if necessary on self-
financing basis.

   The Committee also opined that the State Government may con-
sider setting of a Standing Committee of educationists and admin-
istrators to evolve a long-term strategy to ensure that the school
education in the state is at par with that in the other parts of India.

1.2. *Secondary and Higher Secondary Level*

With regard to with the education at Secondary and Higher Secondary Stages the Committee urged the formation of an experts' committee of educationists and administrators to look into various shortcomings in this system and it further pointed out that the reforms should be in tune with the National Policy of Education [revised 1992]. The Committee urged speedy measures in respect of:

- ❖ Upgrading the syllabus to the NCERT standard.
- ❖ Physical de-linking of Higher Secondary Schools from colleges.
- ❖ Emphasising Value Education, character building, sports, social service and extra curricular activities.
- ❖ Counselling and guidance for all students.
- ❖ Increased use of computer and Information Technology in School Education.
- ❖ This would also help in inculcating the competitive spirit among the students and develop their personality.

The Committee also recommended constitution of an experts' committee to look into the deficiencies and adopt suitable measures. It suggested that trusts of proven records from the other parts of the country may be invited to open model schools at Secondary and Higher Secondary Stages.

The Committee further stated that Assessment and Evaluation Committee may be set up by the State Government to evaluate the working and performance of Secondary and Higher Secondary Schools for awarding them performance rating. This would evolve a spirit of competition   among the schools, which, in turn, are expected to keep the education system vital and dynamic.

The Committee felt that the Government may set up a Standing Committee of educationists and administrators to take note of the changes taking place in India and in other parts of the world so as to initiate suitable advance action to keep education system in the state in tune with them.

1.3 *Teacher Training*

- ❖ Teacher training should be emphasised at all levels, if necessary, by linking it with promotional opportunities.
- ❖ The state government should encourage the use of advanced technologies in this area.

❖ It may be worthwhile considering setting up of suitable machinery in association with the university and colleges of teacher education, to provide regular orientation/refresher courses for school teachers at all levels on the lines of the UGC Academic Staff College set up for college teachers.

❖ The State Government may consider broadening its scheme for rewarding teachers at all levels and bring in disincentives to discourage mediocrity among teachers.

Skill Development

1. *Vocational Stream*

❖ Serious efforts should be made to enhance the quality, standard and relevance of the programme.

❖ Government and private industries should be fully involved in planning and organising programmes.

❖ Internship in industries should be made compulsory in every programme.

❖ The State Government may set up an experts' committee of professionals and educationists to review thoroughly the ongoing programmes and recommend steps to improve the same. German pattern of vocational education could also be considered for implementation.

❖ Counselling and guidance facilities and placement cells are very essential. Serious efforts should be made to set up these cells urgently in every institution.

2. *Technical Education*

The recommendations made under Vocational Education are also valid for Technical Education. A few additional recommendations are as follows:

❖ Technical obsolescence should be addressed to on a continuing basis. For this to be achieved, the state should invite private industries to support technical education.

❖ Efforts should be made to attach production centres to ITIs and Polytechnics to strengthen practical training and skill development as well as for resource generation.

❖ The State Government may also set up a standing Committee of professionals, industry leaders and administrators for overseeing the progress of technical education in Goa and developing it in right lines.

❖ Induction of Information Technology in this area should be taken up speedily to make the progress up-to-date and relevant.

As per Education Act, the School Advisory Board of Education (Goa School Education Advisory Board) is established under the chairmanship of the Hon'ble Education Minister. The meeting of the Board is convened by Director of Education, who is the member secretary, once in a year for reviewing the problems in school education. The representatives of all associations working in the field of education, principals, headmasters, teachers, parents and educationists are given membership of this Advisory Board.

Expenditure on Education

After liberation the expenditure on education has continued to go up. The government elected in 1963 gave importance to education with special emphasis on Primary Education. In the report, 'Economic Review of Goa, Daman and Diu' prepared by Shri Shashikant Gandhe, Director of Bureau of Economics, Statistics and Evaluation (now the Directorate of Statistics, Planning and Evaluation) has observed that the Per Capita Governmental Expenditure on Education in Goa, Daman and Diu is higher as compared to the other states in the country. The Per Capita Governmental Expenditure in the territory in 1969-70 was about Rs 28.43 as compared to Rs 12.53 for whole country. The expenditure for the year 1963-64 was Rs 77.08 lakh, which has gone up to Rs 191.68 lakh i.e., 35 per cent of total expenditure on education in the year 1968-69.

The Per Capita Expenditure on Education in various states is given in the report. The data is given below for three years from 1967-68 to 1969-70.

Table 1.6: Per Capita Expenditure on Education in Goa — Comparison with India and Other States

States/Years	1967-68	1968-69	1969-70
Goa, Daman and Diu	25.78	27.73	28.43
India [whole country]	—	10.08	12.53
Maharashtra	11.77	14.64	14.86
Karnataka	11.52	13.20	15.28
Gujarat	11.12	11.68	13.22
Uttar Pradesh	06.05	06.88	07.87
Bihar	04.54	05.66	08.65

This trend of increasing expenditure on education has continued even after the attainment of statehood in 1987. The details of expenditure as per Source for the years 1964 to 1969 -70 as given in that report are reproduced below:

Table 1.7.1: Expenditure on Education (Rs in Lakh)

S. No	Source	1964-65	1965-66	1966-67	1967-68	1968-69
1	Govt. Funds	129.23	189.51	206.99	262.19	225.31
2	Local Body Funds	0.17	0.06	0.16	0.12	—
3	University Funds	0.01	1.93	1.63	2.14	1.06
4	Fees	26.08	35.72	39.72	43.39	45.29
5	Endowments and Other Sources	19.16	20.73	18.38	12.83	18.32
	Total	**174.65**	**247.95**	**266.88**	**320.67**	**289.98**

The expenditure figures for planned and non-plan expenditure for the year 1990-91 are available, which present an idea of expenditure for all the areas of education.

Table 1.8: Plan and Non-plan Expenditure on Education in the Year 1990-91

S. No.	General Education	Non-plan	Plan	Total (percentage)
1	Elementary Education	1571.40	333.80	1905.20 (30.36)
2	Secondary Education	2967.07	403.60	3370.07 (53.61)
3	Language Development	0.93	24.09	25.02 (0.40)
4	Direction-Administration	66.08	10.00	76.66 (1.25)
	Total Budget of Goa	35103.00	13704.23	48807.83

In the year 1998-99, the total cost per student on Primary, Secondary and Higher Secondary Level with percentage of budget allotted for each level is given below:

Table 1.9: Total Cost and Percentage of Expenditure Per Student at Different Stages of Education – 1998-99

Stage of Education	Cost per Student	Percentage of Expenditure Allotted
Primary Level	Rs 3221	21.87
Secondary Level	Rs 11539	54.85
Higher Secondary Level	Rs 12102	10.51

The total percentage of expenditure comes to 95.28 per cent and remaining 4.7 per cent is towards the cost of administration and supervision.

Some Major Issues and Problems

After going through the review of the School Education for the last fifty years, the major problems and issues that emerge are to be taken into account. Steps can be taken to make the education system strong enough to facilitate all-round development of children while the process of School Education would become more fruitful and meaningful. Achievements of fifty years can be listed as given below:

❖ Progress of Primary Education in terms of enrolment, construction of school buildings, and implementation of operation blackboard scheme is very good.

❖ Progress of literacy after liberation: the state has ranked fourth/fifth in respect of literacy in the country.

❖ Education is free to all the children up to Class XII.

❖ Better pay scale for teachers.

❖ Pupil-teacher ratio is always the best in whole of the country.

❖ Percentage of trained teachers and women teachers is higher as compared to the figures of country level data.

❖ Average population served by each level is good. School facilities for every stage are available at an easily accessible distance.

❖ Out turn of graduates per lakh of population is 140 for Goa as compared to 30 for India.

❖ Number of students enrolled from Primary to Higher Secondary Level is also good. (Goa—232. India—173.68).

- ❖ School Complex Scheme has emerged as an active network in the field of education. It has become a sensitive organisation that responds very promptly to the problems and issues in education.

- ❖ Environmental Education is seriously implemented as an integral part of School Education at all the stages. To intensify environment awareness *Clean School Beautiful School Scheme* is implemented and a competitive spirit is created among schools with rewards and grants for their outstanding performance.

- ❖ Free supply of school material to all children in Primary Schools.

- ❖ No merit list for the SSC and HSC Examinations of the Goa Board of Secondary and Higher Secondary Education.

It is felt necessary in the light of the above points that the following problems and issues prevailing in the field of School Education in the State need an immediate attention.

- ❖ Quality of School Education in all its aspects needs improvement.

- ❖ Influence of English at the cost of learning local languages needs attention.

- ❖ Lack of basic facilities like toilets, lavatories and staff in majority of schools.

- ❖ Absence of libraries and reading rooms in most of the schools at Primary, Middle and Secondary Stage.

- ❖ High dropout rate at Secondary Level.

- ❖ Indifference of community towards school system.

- ❖ Continuing education of the people through libraries and reading rooms needs to be encouraged.

- ❖ Participation of students in competitive examinations has to be encouraged at school level.

- ❖ Posting of teachers in Government Schools in backward Talukas of Satari, Sanguem, Canacona, Quepem has to be done in time.

- ❖ Syllabus of Primary Education needs to be renewed immediately.

- ❖ Steps have to be taken for delinking of Higher Secondary Stage from colleges and integrating it with Secondary Schools.

An attempt is made in this chapter to take a brief review of the historical perspective of growth and development of education in the State of Goa. This chapter would lead to more detailed discussion of points on status, issues and future perspectives of School Education in this State in the following chapters.

List of References

❖ Bureau of Economics, Statistics and Evaluation, Panaji (1973) — An Economic Review of Goa, Daman and Diu for 1961 to 67.

❖ Coutinho, Vesissino (1987) — Education and Development in Goa. Rome: ICSS.

❖ Directorate of Education, Panaji: Statistics Section Education Statistics from 1962 to 2001.

❖ Directorate of Information and Publicity — 1987, 2000 Government Diaries.

❖ Directorate of Planning, Statistics and Evaluation, Panaji. 1998-99 Statistical Handbook of Goa.

❖ Gaitonde, Pundalik (1970) — The Liberation of Goa: A Participant's View.

❖ Larson, Kasin (1989) — Faces of Goa. New Delhi: Gyan Publishing House.

❖ Mahajan, Baldev, Goel, J.C. and Urankar, R.V. (1980) - Educational Administration in Goa. New Delhi: Vikas Publishing House.

❖ Planning Board of Goa, Panaji (July, 2000) — Draft Report of Subcommittee on Education.

❖ Rao 1963 Portuguese Rule in Goa from 1510 to1961. Asia Printing House.

❖ Sart. Estev. Dec. 1966. Goa and its Future.

❖ Shastry, B.S. 1987 Goan Society through the Ages. Delhi: Ajanta Publication.

❖ Varde, Pandurang, S. (1977) — History of Edueation in Goa from 1510 to the Present.

❖ Panaji: Goa Vidya Pratisthan.

❖ Xavier, PDF (1993) — Goa: A Social History. Panaji: Rajhans Prakashan.

Education for All
[Focus on ECCE and UEE]

EFA: The Perspective

The document **Challenge of Education — A Policy Perspective– 1985**, states: *In spite of a specific provision in the Constitution to endeavour to provide free and compulsory education up to the age of 14 by 1960, and several explicit commitments with regard to the achievement of Universal Elementary Education, progress in this sector is far short of the target.* It holds forth that *the target itself has been moving farther and farther to accommodate the failures arising form inadequacy of resources or sheer lack of a viable strategy.* In other words, it has not been possible to extend educational facilities to every child in this country even after a period of three and half decades after the constitution enjoined the goal on the Republic. So is the case today, fifteen years later, the statement appeared in the Policy Perspective stemming in itself, The National Policy of Education [NPE] 86.

Article 45 of the Constitution states clearly that it is the responsibility of the Government to provide free and compulsory universal primary education to every child up to the age of 14 years irrespective of his/her caste, creed, sex, religion and language. Efforts no doubt, are made in this direction as the Government contemplates to declare elementary education as one of the Fundamental Rights of the child. Modalities and other issues concerning the intervention would be debatable but intentions to universalise elementary education in clear terms of access, opportunity and achievement as envisaged in NPE 86 and Programme Of Action (POA) 92 are clear.

In this context, it is very significant that this tiny and youngest state of the country has shown tremendous awareness of the need for education rights from its liberation; in 1961, which came after 14 years of independence of India and 12 years after the adoption of the Constitution. The State has a very bright educational profile today, with a literacy rate of 75.51 per cent with male and female break up as 83.64 and 67.09 respectively. The Population Education Bulletin, Vol. X, No. II of July cites the Total Literacy Rate of the state as 82.32 per cent as per the 2001 census.

It is remarkable fact that the state has provided a substantial share of its budget in the early years of its liberation for upliftment of elementary education. In 1967-68, the state spent 25.78 rupees per, capita, which increased to 27.73 and 28.43 in the year 1968-69 and 1969-70, respectively. What is appreciable is that this expenditure was more than that of any state during these years. This becomes more significant if we consider the range of expenditure of various states as shown below:

Table 2.1 : Expenditure on Education by States as Compared with Goa

Year	Minimum	Maximum	Goa	Placement
1967-68	4.54 [Bihar]	23.19 [Kerala]	25.78	+ 2.59
1968-69	5.66 [Bihar]	22.86 [Kerala]	27.73	+4.87
1969-70	8.65 [Bihar]	25.18 [Kerala]	28.43	+ 3.25

It is notable that the state spent more than the maximum of the total range. Looking at the area of the state which is just 3722 sq. kms and a population of 5.90 lakh* in the year 1961 the awareness of the state at spread of elementary education is highly positive.

Population of the state at that time was about 5.90 lakh. The area and population served by a Primary School at that time was respectively 7.96 kms for a population of 1317.22 which means that there was a Primary School available in an average area of 7.96 kms. The figure today show a remarkable progress when, as in 2001, a Primary School is available in an area of 2.92 kms and serves population of 922. Besides this, the Middle School, which grew after 1961 was serving an area of 10.02 kms

*excluding Daman and Diu

for a population of 2312.66, by 1971, has now shown further development and a Middle School as in 2001, is available within a radius of 8.41 kms and serves a population of 2646.59.

In terms of growth of number of schools as per the statistics shown in the following table:

Table 2.2: No. of Primary and Middle Schools since 1951

Year	Primary	Middle
1951-61	476	—
1961-71	1048	371
1971-81	1218	488
1981-91	1285	441
1991-01	1268	442

The table shows that the highest number of Primary Schools in the state was 1285 in the year 1991 and has shown a small decrease of 17 schools in a decade 1991-2001 which could be due to a slight decline in the population of school-going children leading to less enrolment.

The state passed in 1995, Compulsory Education Act, in spite of remarkable high enrolment of students in its schools. The enrolment of students at Elementary Level in last 50 years is shown in the following table :

Table 2.3: Enrolment at Elementary Level since 1961

Classes		Primary			Middle	
Year	Boys	Girls	Total	Boys	Girls	Total
1961	—	—	43654	—	—	—
1971	57393	47284	104677	21169	17791	38960
1981	69369	60046	129415	39015	30795	69810
1991	54450	50173	104623	44491	37836	82327
2001	50148	47309	97457	38574	34152	72726

The figures in the table show that at the time of liberation, the total enrolment was 43654 while there were no Middle Schools and just 95 High Schools were functioning.

The enrolment of students belonging to SC/ST in the state is given in the following table:

Table 2.4 : Enrolment of SC/ST Students since 1981

Year	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1981	1726	1289	3015	902	531	1433	791	427	1218	129	43	172
1991	831	795	1626	81	63	144	663	490	1153	68	27	95
2001	1442	1411	2853	77	62	139	981	741	1722	52	40	92

A comparative perspective of the enrolment of different categories of students in elementary schools in the state is given below :

Table 2.5: Enrolment of Boys and Girls from General and SC/ST Categories (I to IV)

Year	Boys			Girls			Total		
	General	SC	ST	General	SC	ST	General	SC	ST
1971	57393			47284			104672		
1981	69369	1726	902	60046	1289	531	129415	3015	1433
1991	54450	831	81	50173	795	63	105123	1026	144
2001	50148	1142	77	47309	141	62	97451	2853	139

Table 2.5.1: Enrolment of Boys and Girls from General and SC/ST Categories (V to VII)

1971	21169			17791			44956		
1981	39015	791	129	30795	427	43	69810	1218	172
1991	44491	663	68	37836	490	27	82327	1153	95
2001	38574	981	52	34152	741	40	72726	1728	92

The number of students belonging to the SC/ST in the state seems to be quite negligible compared to the enrolment of the students belonging to general category. The percentage of the enrolment of the boys and girls of SC/ST as against the boys and girls of general category is as shown below:

Table 2.6: Percentage of SC/ST Boys and Girls as Against the Boys and Girls from General Category (Classes I to IV)

Sex	Boys		Girls	
Year	SC	ST	SC	ST
1981	2.48	1.30	2.14	0.88
1991	1.52	0.14	1.58	0.12
2001	2.27	0.15	2.98	0.13

Table 2.6.1: Percentage SC/ST Boys and Girls as against the Boys and Girls form General Caterogy Classes V to VII

1981	2.02	0.33	1.38	0.13
1991	1.49	0.15	1.29	0.07
2001	2.54	0.13	2.16	0.11

This table shows that :

❖ The percentage of enrolment of SC boys at Primary Stage in last 30 years ranges from 1.52 to 2.48. In 1991 it declined to 1.52 but shows a slight increase of 0.75 in the year 2001. Similar trend appears in the enrolment of SC girls as it falls down to 1.58 in the year 1991 but shows an increase of 1.40 in the year 2001.

Table 2.7: Gross Enrolment Ratio

Age Group	Category		1971	1981	1991
	General	Boys	125.0	131.9	90.6
		Girls	103.7	112.2	100.5
		Total	**114.35**	**122.05**	**95.55**
6-11	SC	Boys		132.8	69.50
		Girls		107.4	55.33
		Total		**120.1**	**62.41**
	ST	Boys		150.3	90.73
		Girls		88.5	62.82
		Total		**119.4**	**76.77**
	General	Boys	77.8	87.4	95.1
		Girls	50.1	64.0	84.1
		Total	**63.95**	**75.7**	**89.6**
11-14	SC	Boys		113.0	105.31
		Girls		53.4	116.77
		Total		**83.2**	**111.4**
	ST	Boys		43.0	35.53
		Girls		10.8	20.81
		Total		**26.9**	**28.07**

❖ The enrolment of ST boys and girls seems to be falling in the last 30 years.

❖ The pattern of enrolment percentage of boys and girls at Middle School Level shows the same trend. In 1991 the

percentage seems to have decreased in case of both SC and ST boys and girls. However, the percentage of ST boys and girls seems to be falling from 0.33 to 0.13 and 0.13 to 0.11 in cases of boys and girls respectively.

❖ At first sight the figures may show an alarming disparity in the enrolment, but taking the population share of SC/ST into account, as per the census report of these years, it is not so.

❖ The gross enrolment ratio of these years as given in the following tables shows that the enrolment of SC/ST boys and girls is quite satisfactory.

The data provided in this chapter show that enrolment of children in the Elementary School is quite impressive and contributes to a positive picture of education in the state. The state government has introduced several incentive schemes to promote enrolment in the Primary Schools and children have received benefits from these schemes. The state government has extended special incentive to the children belonging to SC and provides them educational opportunities.

Table 2.8: Incentive Schemes for SC/ST Students and Number of Beneficiaries with Amount of Expenditure

S. No.	Name of the Scheme	Year	No. of Beneficiaries	Amount [Rs. in lakhs]
1	Grant for text and notebooks, uniform and stitching charges for SC students		587	1.86
2	Rajiv Gandhi Shiksha Sahaya Yojana	1997-98	6169	19.98
		1998-99	7212	23.45
		1999-00	3134	10.36
		2000-01	2197	5.49
	Total		19299	61.14

The beneficiaries were awarded a scholarship of Rs 250/- p.a. for their Middle School Education [Class V to VII] and Rs 400-p.a. for their Secondary Education [Class VII to X].The break up of the students according to their level is not available for the year 1997 to 2000, but during the year 2000-01, 2197 students received the scholarship for Middle School Education as shown in the table. Besides these beneficiaries, 3969 students received a scholarship of Rs 400/- p.a. for Secondary Education.

This scholarship is also awarded to the students to complete their Higher Education. The details will be furnished at a later stage.

Development of Girls' Education

The state has also awarded monitory incentive to poor and needy girl students in standard I to VII in rural areas of six Talukas of Sanguem, Bicholim, Qupem, Canacona, Pedne and Sattari. This facility is provided only to non-SC/ST/OBC students who are studying in Government Schools. Wards of the guardians having an income of less than Rs 25000/- p.a. are awarded a scholarship of Rs 200/- p.a.

Opportunity Cost for Scheduled Castes

The scheduled caste population of the state is in only 2 per cent of the total population. Moreover, the said population is found scattered throughout the state and has remained so far economically backward. In view of their poverty, the Directorate of Education has formulated a scheme of "Opportunity Cost for Scheduled Caste Students" exclusively for SC population. The scheme under special Component Plan is being implemented since the Fourth Five Year Plan. Prior to 1990-91, the scheme was applicable to SC girls only but the same has been extended to SC boys from the year 1990-91 at the instance the Ministry of Welfare, New Delhi. The State Government has also approved this. All the students of standard I – IV and V-VII enrolled in government. and aided schools are entitled to avail these facilities. The amount is paid to the parents of the child. The incentive is Rs 500/- p.a. for Primary School Students and Rs 750/- p.a. for Middle School Students.

Expenditure under this scheme with number of beneficiaries at Primary and Middle Stage in the Ninth Five Year Plan (1997-01) is detailed in the following table.

Table 2.9: Expenditure and Number of Beneficiaries under Opportunity Cost in Ninth Plan (1997-01)

1997-98	1997-98	1998-99	1999-00	2000-01
Amount [Rs in lakhs]	9.07	13.12	14.35	14.55
No. of Beneficiaries	1766	2275	2556	2716
Primary	1414	1925	2265	2328
Middle	352	350	391	388

The state has also devised a scheme of awarding scholarships to selected students of standard IV studying in all Primary Schools of Goa, having Marathi, Konkani, and Urdu as medium of instruction. The scheme was launched in the year 1993. Conducting Incentive Scholarship Examination every year in the month of April for awards of the scholarship to students studying in standard IV and having scored maximum marks in language (Mathematics and Environmental Studies) in the first terminal examination. Every school nominates 10 students, two each from different categories. The number of scholarships was increased from 125 to 220 since 2000-01 with an increase in amount of scholarship Rs 200 to Rs 400/- up to standard X.

The incentive scholarship scheme implemented from 1992-93 has given benefit to the students studying in standard IV. Initially 125 scholarships each of Rs 200/- were awarded to the students belonging to the various categories from each Taluka of the state. Besides the scholarships shown in the Table 2.10 five scholarships were given to the students coming from slum area of the state.

The following table shows the break up of scholarships awarded.

Table 2.10: Total Number of Scholarships Awarded for School Education

S. No.	Category	No. of scholarships
1.	General	6 *
2.	Landless Labour	3
3.	SC/ST	2
	Total	11

These scholarships were awarded to the students coming from Rural and Urban area. The number of scholarships was increased from 125 to 220 in the year 2000-01 as shown in the following table :

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* Five scholarships instead of 6 were awarded to the students from Marmugao Taluka

Table 2.11 : Number of Scholarships Increased as in 2001

S. No.	Category	Rural	Urban	Total
1.	General	6	2	8
2.	Landless Labour	2	2	4
3.	OBC	2	1	3
4.	SC/ST	2	1	3
5.	Slum Dwellers	1	1	2
	Total	13	7	20

Twenty scholarships as divided into urban and rural area of each taluka are awarded to the students of all eleven talukas of the state. It is notable that these scholarships are also awarded to the students of urban area of the state from 2000-01.

The details of the beneficiaries along with scholarships since 1997 are furnished in a later chapter.

Pre-school Education

A large network of pre-school education has emerged in the state in the post liberation period. According to the status report of Directorate of Education in the year 1995-96, there were 1,16,816 children in the age group of 0-4 which form 28.90 per cent of total population of children in the age group of 1-14.There is a varied set up of pre-primary education in the state, but main intervention in the field is done by the Integrated Child Development Scheme [ICDS]. There are also English medium schools run by the non-government organisations covering a large portion of pre-primary education. Some NGOs run Konkani or Marathi Pre-primary Schools while some Government Primary Schools have Pre-primary Sections. In a survey made by a team of Dr I.D.Gupta and Shri A.C.Pachori of Regional Institute of Education, Bhopal in association with State Institute of Education, Goa in April 1997 elaborate details were cited. Their observations pertaining to each set up are given below:

1. Integrated Child Development Scheme (ICDS)

The Anganwadi centres run under the ICDS is the largest network in the state. Their medium of instruction is mainly Konkani, but education in some of these Anganwadis is imparted in Marathi/Kannada/English medium as preferred by the community served by the particular Anganwadi.

The team observed that the health check up and referral services available in the Anganwadi centres were scanty.

inspite of their appreciated efforts for regular and supported teacher training, the fact that the curriculum is more of an academic nature remains a matter of concern. They have also observed that the curriculum inputs are drastically changed by S.I.E. since 1993, while teaching of alphabets is substituted by psychological curriculum.

A daily schedule of timetable of Anganwadi is also given in their report. They further observed that the Anganwadis received an overwhelming demand and have to run overcrowded centers in urban areas. They also pointed out the effective workers fetch more children in rural areas too. They have taken a note of the ICDS working in competition with private K.G.s, which get children by providing them free uniform with the help of MLA or Panchayat.

2. *Pre-primary Section*

There is a facility for imparting pre-primary education in the Government Primary School run by Directorate of Education. It is one-year schooling programme for the children of the age of 4+. This facility is made available in the areas, which are not served by the ICDS. There are 97 Government Primary Schools having Pre-primary Sections. The team further observed that the setting of a Pre-primary Section is quite unattractive and runs the risk of being closed down as private schools have more attractive programmes for catching the children who are as young as three years or less.

3. *Nursery or KG Schools*

The members of the team noted that this is one of the earliest system of Pre-school Education in the state mainly having English medium and run by the private managements. The number of these is not available, as the State Government does not provide any grant to these schools. Besides, they are unregistered. However, steps are being taken to make these institutions seek Government recognition in future.

The team observed that the pre-schoolers in the nursery or KG Schools face difficulty in learning Devanagari script in grade I and II. It must be clarified here that the State Government adopted a policy from the year 1998, to provide grants to the Private Primary Schools having only the Indian languages as medium of instruction. This means that the schools have to adopt the regional languages i.e., Konkani or Marathi or any Indian language as per the need of the students to become eligible for Government Grants This resulted into problem of acquisition of language at Pre-primary and Primary

Schools. In a nursery or KG school, children are taught English and they have to face a shift from English to Konkani or Marathi in the primary schools. The major problem in this process relates to learning Devanagari script in grade I and II. Besides, the curriculum in these schools is mostly academic and irrelevant to the child's need and therefore burdensome. The parents of the children pay high fees and children are admitted through an admission test.

4. *Bal Vikas Mandir*

Private Managements run these pre-primary schools and their medium of instruction is the vernacular [Marathi / Konkani]. Among these managements, there are many who socially committed organisations.

The curriculum taught in these schools is definitely softer than that of the K.G./Nursery schools for the reason that it is the children's mother tongue .The timetable has school-like blocks of 35 minutes periods.

The curriculum is academic in nature. Slate, paper and pencil are used for teaching writing respectively in Class I and II. Admissions in these schools are open and are made without admission tests. Most of learning materials used in these schools is purchased from market. Fees are lower as compared to the fees charged by the K.G./Nursery schools. In both settings, teachers are paid very low amount as their salaries.

The figures regarding number of Bal-Vikas Mandirs in the State and their enrolment in these schools were not available.

Table 2.12 : Pre-primary Education in the State as on September 1993

S. No.	Type of Pre-primary Set Up	R/U	No. of Inst.	No. of Teachers			Enrolment		
				Male	Female	**Total**	Boys	Girls	**Total**
1	Balwadis/	R	702	2	721	**723**	7026	7127	**14153**
	Anganwadis	U	247	-	252	**252**	3368	3522	**6890**
		Total	**949**	**2**	**973**	**975**	**10394**	**10649**	**21043**
2	Pre-primary	R	132	8	205	**213**	2875	2615	**5490**
	Classes	U	81	1	246	**247**	3984	3625	**7609**
	attached to	**Total**	**213**	**9**	**451**	**460**	**6859**	**6240**	**13099**
	Schools (KGs)								
	Total of 1	R	834	10	926	**936**	9901	9742	**19643**
	and 2 above	U	328	1	498	**499**	7352	7147	**14499**
		Total	**1162**	**11**	**1424**	**1435**	**17253**	**16889**	**34142**

The table shows that :

❖ A substantial number of children were sent to pre-primary school in the year 1993. Boys' and girls' enrolment is almost equal.

❖ There is no visible disparity in the enrolment of children in rural and urban area, considering the number of pre-primary institution distributed in these areas.

❖ The number of children enrolled in the school in a particular area corresponds to the number of institutions available. However, it is remarkable that about 7609 children are enrolled in 81 pre-primary classes attend schools from urban areas. This shows preference of the parents for enrolling their children, in the urban schools to facilitate continuity of their education in higher classes.

The provision for elementary education made by the State Government accounts for its positive efforts as far as the number of institutions, teachers and enrolment are concerned. The problem faced in the set up of elementary schools is not of a small magnitude. The problem mainly pertains to:

❖ Dropout rate at standard X

❖ Closure of Government Primary Schools

❖ Decline of enrolment in the Government Primary Schools.

The nature of each of the above problems is discussed below :

Dropout Rate

The following tables show the dropout rate in the state since 1991-2001. Table 2.13 gives details of dropout of children belonging to the general category with a break up of boys and girls. The table 2.14 cites a comparative data of the students belonging to General, SC and ST categories.

Table 2.13: Dropout Rate of Boys and Girls from General Category at Various Stages of Enrolment since 1991

Classes		I–IV			V–VII			IX–X		
S.No.	Year	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1.	91-92	−4.60	5.47	0.27	6.71	11.26	8.88	51.40	54.48	52.86
2.	92-93	−1.68	10.55	4.31	12.43	17.48	14.84	48.40	49.34	48.65
3	93-94	−7.94	3.10	−2.58	8.48	15.61	11.89	40.66	41.42	512.02
4.	94-95	−2.30	7.17	2.28	11.55	1786	14.60	41.67	41.53	41.61
5.	95-96	1.56	9.45	5.39	10.44	19.21	14.73	45.76	5.74	45.75
6.	96-97	2.74	9.57	6.06	2.44	13.41	7.77	43.49	43.27	43.38
7.	97-98	5.41	12.75	8.95	6.20	12.23	9.12	46.49	46.71	46.60
8.	98-99	-0.15	8.72	4.20	4.70	11.26	7.88	41.69	42.45	42.06
9.	99.00	5.83	11.50	8.58	7.14	13.26	10.11	43.22	43.46	43.85
10.	00.01	3.00	9.94	6.37	5.73	13.25	9.36	44.23	43.46	43.85

Table 2.14 : Dropout Rates of Students Belonging to General, SC and ST at Different Stages of Education in the state

Classes	I – V			VI – VIII			IX – X		
Year	Gen.	SC	ST	Gen.	SC	ST	Gen.	SC	ST
91-92	0.27	45.73	7.41	8.88	58.90	85.03	52.86	86.76	96.30
92-93	431	40.51	81.71	14.84	55.28	92.03	48.85	71.61	98.75
93-94	-2.58	40.81	35.14	11.89	88.98	78.86	51.02	76.35	93.88
94-95	2.28	34.81	94.34	14.60	62.20	85.19	41.61	76.28	98.55
95-96	5.39	-8.62	20.00	14.73	63.75	67.07	45.75	84.94	97.27
96-97	6.06	48.37	-7.32	7.77	53.58	45.95	43.38	81.52	74.07
97-98	8.95	16.98	53.59	9.12	50.8	83.02	46.60	73.84	90.24
98-99	4.20	15.11	6.0	7.88	6.01	31.43	42.06	76.73	78.38
99-00	8.58	39.2	-9.52	10.11	62.20	7.31	42.83	78.96	84.90
00-01	6.37	4.31	-76.47	9.36	30.31	72.09	43.85	57.11	71.43

The dropout rate would seem alarming against a very impressive picture of growth and development of elementary education in the state since its liberation. It has been a subject of study for educational thinkers and institutions over the years.

Taking the magnitude of the dropout into account, the studies were concentrated on probing into the causes of dropouts, so that suitable strategies to check the number of dropouts could be evolved. Some of the observations emerging out of the studies are as given below.

Shri R.V. Bhat submitted a thesis on 'An Investigation into Wastage and Stagnation,' for his M.Ed. Examination. The focus of his study was the wastage occurring in Government Primary schools in Sattari, one of remote packets of the state. He attributed the causes of the problem to ineffective schools being ineffective stating: *Increased number of schools had not achieved the expected increase in the enrolment.* He further classified the causes of dropout according to related factors such as family, community, individual pupil, teachers and schools.

A questionnaire was sent to the schools in the state so as to seek the views of teachers and school authorities on the causes of dropout. They were also asked to offer the solutions to resolve the problem. One hundred forty-five schools responded to the questionnaire and cited the following causes of dropouts. This

study was prompted by the requirements of Planning Commission which observed that the dropout rate in the state is quite high from Class I to X. Here is a response analysis that furnishes the details of reasons of dropout and the number of schools furnishing the particular reasons.

Table 2.15 : Dropout: Response Analysis of 145 Schools

S.No.	Reason of Dropout	No. of School
1	Financial problem/poverty	38
2	Employment/Family Occupation	25
3	Parental illiteracy	23
4	Change of medium of instruction	21
5	Family Problems/Customs	18
6	Repeating/stagnation	17
7	Curricular load and rigidity	16
8	Failure in improving for better scholastic performance	12
9	Failure of educational system to develop practical skills	11
10	Migration	10
11	Adverse impact of T.V.	09
12	Over-age of the child for a particular class	09
13	Girls needed for domestic work	08
14	Language problem affecting overall understanding	05
15	Bad peer group	04
16	Selection of wrong Subjects/Stream	04
17	Discouraging attitude of teachers	04
18	Distance between school and houses	04
19	Disproportionate teacher: pupil ratio	04
20	Dull teaching-learning processes	04
21	No encouragement to self learning	03
22	Lack of basic minimum facilities and resources	03
23	Handicaped students	01
24	Addiction to tobacco, smoking, gutka, drugs etc	03
25	A craze for rich and showy life	01
26	Sense of insecurity	01
27	Lack of ability to adjust	01
28	Fictitious enrolment	01
29	Lack of parental attention and guidance	17
30	One time schools	-
31	Lack of career guidance	02
32	Lack of interest	17
33	Textbook materials being difficult/defective	04
34	Promotion rules too rigid and strict	07
35	Sickness/physical ailment	05
36	Health of the incumbent	01
37	Cultural deprivation and poor environment	02
38	Being ashamed of constant scolding	01

39	Loss/sickness of earning parent	04
40	Malnutrition/improper diet	02
41	Examination-oriented education system	02
42	Search of employment abroad	03
43	Reservation of SC/ST	01
44	Entry age is reduced	01
45	Early marriage of girls	01

An attempt was made to relate the area of the problem and solutions to the problems along with the implementing body/ agency who could take up the task in the process of checking the increasing dropout rates. For this the State Institute of Education prepared a chart giving details of dropout analysis as given below. The said chart was placed for discussion before the authorities of Directorate of Education.

Table 2.16 : The Details of Dropout Analysis

S. No.	Area	Problem	Solution	Implementing Body/Agency/ Office/Authority
1.	Financial problem	1. Loss/sickness of an earning parent. 2. Distance between home and school.	❖ More incentives to the needy students. ❖ Weak students may be adopted. ❖ Provision of mid-day meal to the children of V to X. ❖ Boarding school/ hostels for poor children	PTA/school/DE PTA/school complex DE/NGOs
		3. Addiction to tobacco/gutka etc. 4. Craze for rich and showy life. 5. Company of bad peers.	❖ Counselling in schools by appointing a counsellor for each school complex	DE/PTA/NGO
		6. Employment/ family occupation 7. Employment/ family occupation	❖ Provision of National Open School in each Taluka ❖ Arrangement of Study centre/room in each village Opening of night schools for working children.	Govt./DE DE/NGO DE/ Society

2.	Parental Illiteracy	—	❖ House to house visits of teachers to educate parents.	Schools/school complexes
			❖ Education of parents through PTAs.	PTA/school complexes
3.		Lack of parental guidance and attention.	❖ Parents should cooperate in completion of home-work by their children	PTA/Schools
4.	Medium of Instruction	1. Change in medium of Instruction. 2. Language problem.	❖ Medium of instruction should be the same for all stages.	Govt.
			❖ It should be the mother tongue of the child.	Govt.
			❖ Combine passing in language may be encouraged.	GBHSE/DE/ SIE
			❖ Introduction of English from std.I.	DE
			❖ More efforts to improve English in primary schools.	SIE/DIET
			❖ Change the medium of primary education from regional language to English.	DE/Govt.
			❖ Mixed medium should be encouraged i.e. social science through regional language.	GBHSE/DE
5.	Curricular load and rigidity	1. Failure in improving scholastic performance	❖ Visit to homes to supervise studies of students.	School/teachers
			❖ Question bank in each subject could be prepared.	Schools/super school complexes/ teacher associations
			❖ Weak students may be adopted. One/two students by each teacher in the school.	

		❖ Supervised study classes could be opened in all schools in the evening for developing study habits among students from std. V onwards.	
		❖ Full day school system may be introduced.	
	2. No encourage-ment to self-learning	❖ Encourage self study habits among children.	
	3. Dull teaching-learning processes.	❖ Learning must be activity-oriented.	Teachers/heads of Schools
	4. Discouraging attitude of teachers.	❖ Regular remedial teaching to be conducted.	
		❖ Self-study material should be provided to weak students.	
		❖ Two levels of Math/Science.	DE/Government/
		❖ Textbooks may be made easier to suit average students.	GBSHSE Teachers
	5. Textbook material difficult Exam. oriented education system and failure in developing practical skills.	❖ Make education job/employment-oriented.	
		❖ Make provision in curriculum for equipping students with practical skills necessary for employment.	SIE/GBSHSE
		❖ Introduction of vocational subjects from std. VIII.	
		❖ Curriculum should be more practical and related to day-to-day life.	SIE/DIET/ GBSHSE/
		❖ Change in evaluation scheme is needed	DE/DIET/ GBSHSE/ Advisory Board
		❖ Supplementary exam in June may be	DE/Govt.

			introduced for std V for students who fail.	
6.	Promotion rules	Existing detention Policy	❖ No detention policy in primary education has to be discouraged.	DE/Government DE/Government
7.	Career Guidance and Counselling	Lack of Career Guidance.	❖ Aptitude test right from std. V may be introduced. ❖ Arrangement of career guidance in each school. ❖ Counseling in each school by appointing a counselor for a school complex.	DE/SIE/ GBSHSE/ Advisory Board
8	**Miscellaneous** Solutions to the problems of general nature not specified in the list but the solutions are offered, as per given aside.		❖ Proper orientation of all subject teachers, specially teachers teaching std V may be regularly organised. General transfer of teachers may be effected regularly. ❖ Strong action against irregular teachers. ❖ Regular health checks up of students may be undertaken. ❖ Talukawise meetings of Headmasters/ teachers may be conducted in June every year.	SIE/DIET/ GBSHSE DE/Govt. DE/Schools/ School complexes with local Primary Health Centres Zonal Education Offices

Abbreviations Used:

1. Govt. – Government of Goa 2. DE – Director of Education 3. GBSHSE – Goa Board of Secondary and Higher Secondary Education 4. PHC – Primary Health Centre 5. DIET – District Institute of Education and Training 6. PTA – Parents Teacher Association 7. NGOs – Non-government Organisations.

The Directorate of Education had also made an effort to locate out-of-school children in the year 1997. It brought Talukawise information of children in the age group of 4-14 years who are out-of-school. This information is not directly related to dropout rate, but gives additional data about the indirect causes to the dropout problem. The following data shows the number of students who were out-of-school as on 30-9-1997.

Total no. of out-of-school children	Male	Female
2901	1318	1583

Out of these school children, 216 students attended some school earlier. Reasons for not-attending school and the related frequency for each reason are as shown below:

Table 2.18 : Number of Out-of-School Children Vis-Vis Causes for Non-attendance

S. No	Reason	Number
1.	Employed as domestic servants	28
2.	Employed as registered establishment	42
3.	Employed as unregistered establishment	608
4.	Helping parents	193
5.	Physical disability	428
6.	Poverty	260
7.	Non-availability of school facility nearby	195
8.	Lack of interest	264
9.	**Any other reason [as specified below]** ✓ Continuous failure ✓ Migrants ✓ No Kannada medium facility in the school ✓ Reason not specified	 12 374 62 55

The table furnished by the Directorate also indicates the number of out-of-school children who are at same stage enrolled in the schools. A total number of 2488 children, out of 2901, were enrolled in the schools. The table indicates the ongoing efforts of Directorate of Education for providing education for all the children in the state though the number of migrants' children belonging to "floating population" is high.

Following the National Policy of Education in 1986, the state implemented 'Operation Blackboard Scheme' from 1987 in which

the focus was on eliminating or at least reducing the number of single teacher schools in the State.

Schools were provided more accommodation and a second teacher during the year 1989 to 1994. Almost all the Government Primary Schools were provided Operation Black-board material worth Rs 8,000/- to 10,000/- per school to facilitate better learning. In 1992-93, the DIET-conducted training programmes for the Resource Persons and teachers orienting them to use Operation Black-board material effectively in the classroom. One hundred ninety seven Resource Persons and 3114 teachers were trained in this area. Yet the follow-up visits to the individual schools show disappointing scenario in this respect.

The educationists who took part in discussion expressed that the growth and development of school education is satisfactory, but they felt that efforts were required to encourage use of material given to the primary schools, under the operation Blackboard scheme. Shri B.da Cruz, Ex Director of Education, observed, the O.B. scheme has become disoriented and resulted into non-use of O.B.material over years.

The Sub-committee of Planning Board of Goa, which submitted its report on education in July, 2000 made some recommendations related to standard and quality of education. Some of these are useful in checking the growth in dropout rate.

❖ Providing different timings for school hours in urban and rural areas. [to minimise the dropout rate in rural area.]

❖ Making Primary and Middle School Education in Goa as per the National Pattern and raising its standard,

❖ Encouraging sports, cultural and extra-curricular activities among school children.

From these recommendations there emerged vital issues of elementary education in the state pertaining to the standard and quality of elementary education. The state has to design a policy to tackle these issues.

Education for All
(With a Focus on Literacy, Alternative Schooling and Education of Children with Special Needs)

Introduction

Goa is one of the highly literate states ranking 4th in the All India Literacy Data. The state has shown its inclination towards uplifting literacy status since liberation. The chart of decadal growth of literacy in the state shows a rise of 20.4 per cent in the decade from 1961–71.

This was a period of the first ten years of its liberation. The growth has remained steady, though there is a slight fall in the percentage of growth. The state has remarkably struck a balance between male and female literacy. The achievements are a result of total awareness of education among the public and the programmes implemented in the state towards total literacy Mission also have been found useful in toning up the literacy status of his state. This chapter provides details of the literacy scenario in the state including information of the programmes taken up under National Literacy Mission since 1992.

Section I – Literacy

Spread of education at all levels in the state presents quite an impressive data and it can be said positively that it has bent hand in the efforts of eradicating illiteracy in the state. The following table gives the details of literacy rates in the state since 1961.

Table: 3.1 : Literacy Rate in the State of Goa (1961–2001)

Year	Urban			Rural			Average		
	Male	*Female*	*Total*	*Male*	*Female*	*Total*	*Male*	*Female*	*Total*
1961	57.02	48.53	48.85	36.16	20.78	20.17	39.38	23.59	31.23
1971	64.54	47.80	56.78	50.96	32.03	41.37	54.65	35.81	45.31
1981	71.88	51.57	65.08	63.06	44.15	53.56	76.01	55.17	56.66
1991	86.33	73.38	80.10	81.71	62.67	72.31	83.64	67.09	75.51
2001	—	—	—	—	—	—	88.88	75.15	82.32

The decadal growth in the Literacy Rate shows that in the first 10 years, the literacy rate had a rise of 14.0 per cent and maintained this rate up to 1981, when it reached its peak at 20.4 per cent. Thus, the impact of spread of education exercising directly on the rise of Literacy Rate could be clearly seen. In 1991 and 2001 the Growth Rate shows a steady decline of 9.8 per cent and 6.81 per cent respectively after 1981. Yet the overall Literacy Rate is on the plus side during the whole period of 40 years from 1961.

The following graph indicates the decadal growth in last four decades.

Graph 3.1 : The Decadal Growth in the Literacy
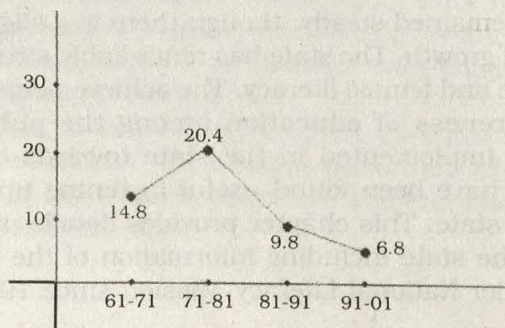
The state has shown a rise in the rank in literacy among states during this period. The state had its Literacy Rate at 31.16, an all time low in the period when it ranked 8th in the literacy status among the country's states. Here are details of the range of literacy and the rank of the state in the range.

Table 3.2 : The State's Rank in Literacy

Year	Range			
	Maximum [State]	Minimum [State]	Literacy Rate of [Goa]	Rank of Goa state in Literacy
1961	52.75 Delhi	9.48 D.N.H.	30.75	8th
1971	60.42 Kerala	11.29 Arunachal	44.15	5th
1981	70.42 Kerala	20.78 Arunachal	56.66	5th
1991	89.81 Kerala	38.48 Bihar	75.51	5th
2001	90.92 Kerala	47.53 Bihar	82.33	4th

The state was 8th in rank in the year 1961. In 1971 and 1981 it attained 5th rank and in 2001 it has risen one step upwards to the 4th rank. While attaining the higher ranks in the status the Literacy Growth shows that the distance of the Literacy Rate of the state with that of the maximum in the range is being reduced. In 1961 the state had a Literacy Rate of 31.16 per cent when the maximum in the range was 52.75 and the difference was of 22 per cent. In the following decades the difference had been much less while in 2001 the maximum in the range in 90.92 per cent and the difference is of 8.59 per cent.

It is also remarkable that throughout the time of its liberation, the state has kept the Literacy Rates above the national Literacy Rates. The comparative perspective of Literacy Rates of the State and India can be seen in the table given below :

Table 3.3: Literacy Rates in the State as Compared with India since 1961

Year	1961	1971	1981	1991	2001
Goa	30.75	44.75	56.66	75.51	82.33
India	24.02	29.46	36.22	52.21	65.38
Comparative Perspective	+6.73	+15.29	+20.44	+23.30	+16.95

This point could further be elaborated with the help of a graph that offers a comparative perspective. The perspective also shows the difference in the Literacy Rate of India and of Goa.

Graph: 3.2 Literacy Rates — Goa and India: a comparative perspective

82.32 (Goa)

75.51

65.71   65.38 (India)

52.21

45.31

36.22

31.23   29.46

24.02

29.49

Difference

1961   1971   1981   1991   2001
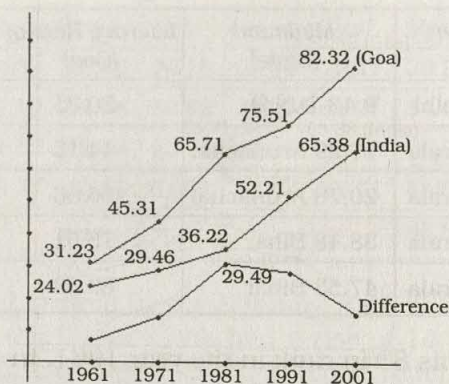
The above comparative perspective leads to the following interpretations :

❖ The Literacy Rate in the state is all the time higher than the Literacy Rate of India.

❖ Maximum difference between the rates was in the year 1991 when it was 23.30 per cent.

❖ The Literacy Rate in the state shows a Steady Growth.

Area of high incidence of illiteracy was among rural females in 1961, when their literacy rate was 20.78 per cent. In the recent time the Literacy Rate of the rural females shows an indication of growth as shown in the following graph.

Graph 3.3 : Growth in Female Literacy in Rural and Urban Areas

Rate

80
70
60
50
40
30
20
10
0

1961   1971   1981   1991

Year

◆ Rular
■ Urban
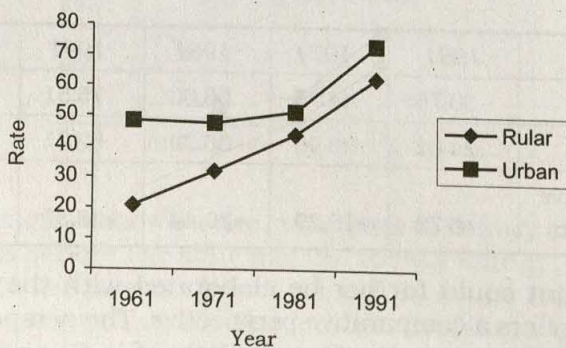
The representation also indicates a reduction in difference between the Urban and Rural Female Literacy Rates. Besides the Literacy Rates across the male/female and rural/urban areas are quite near to the Total Literary Rates of the state that further confirms a balanced development of literacy in the state.

Total Literacy Campaign

It would be very interesting to take a review of the literacy programmes in the state launched in the year 1992 when the project was sanctioned in the year 1993. Achievement Status of TLC as 1997-98 indicates the following:

Achievement Status: TLC 97-98

The target for liberating the illiterates in the project was 1.01 lakh people with a break up 0.23 lakh males and 0.78 lakh females. The total number of the illiterates in the state is 0.86 per cent of the total population of 1.17 million as per the 1991 census. The total population consisted of 0.60 million males and 0.57 million females, further divided into 0.60 and 0.48 million respectively into rural and urban population. The SC/ST illiterates to be covered under the project are just 0.6 per cent.

The profile placed in the Annual Report 1997-98 brought out by National Literacy Mission, Directorate of Adult Education cites in Achievement status that only one district of the state attained achievement between 40 per cent and 60 per cent while the details point out as following:

- ❖ **The total target of TLC: after survey: 1, 00,627**
- ❖ **Enrolment   1,00,527**
- ❖ **Achievement level**

First Level	79,826 [79.33%]
Second Level	79,826 [79.33%]
Third level	49,910 [49.60%]

The details, thus, indicate that almost all of the total population identified after survey was enrolled in the total literacy project. Only 100 remained non-enrolled. In other words 99.90 per cent enrolment was done, out of which 79,826 attained to second level of literacy while only 49,910 continued at the third level. The Annual Reports State that according to the External Evaluation Reports, the achievement level was just 18.20 per cent. The external evaluation was done by the

Tata Institute of Social Sciences under the leadership of D. Denzil Saldhana.

Now it would be interesting to look into the Literacy Rate of the state in the year 1991-2001. The figures show a fall in the growth of Literacy Rate from 9.8 per cent to 6.8 per cent as compared to that between 1971 and 81 when the growth was 20.4 per cent.

This may stand for two indications that :

1. The literacy growth was impressively high since 1961 and reached to 56.66 per cent from 31.33 per cent in the year 1981. The speed of growth was still impressive between 1981-91.There was no special drive for irradiation of illiteracy in the state till 1991.

2. In spite of the TLC, which attempted to cover a small population of 1.01 lakh, the literacy rate has shown a decline in the rate of growth during the period 1991-2001.

The state ran literacy centers across its territory with the help of local youths having passed standard eight. The focus of instruction was of attaining skills in three R's i.e. Reading, Writing and Arithmetic. The instructors were given a remuneration of rupees 200/- per month. The approaches adopted to achieve the goal of total literacy were both.

❖ Running adult education centers and
❖ Each one teach one.

The participation of the state in the Total Literacy Campaign and National Literacy Mission did not continue though the state government has encouraged NGOs in this activity under grant–in-aids scheme.

The state has to follow a long track in attaining 100 per cent literacy. The achievement of the state, so far as the Literacy Rate is concerned, is very remarkable.

Section II — Alternative Schooling

The reason for the dropout and non-enrolment in the classes from I to V is generally attributed to the floating population, which means children belonging to migrating communities are have to give up their schooling for some time during the period of migration. It is also likely that most of them don't even get themselves enrolled. The data compiled by the Directorate of Education in 1998, as on 30-9-97 shows that there are out of

school children in age group of 5 to14 due to various reasons. The following table shows the reasons and the number of out-of-school children with their percentage in the descending order.

Table 3.4 : Number of and Percentage of Out-of-School Children With Reasons

S.No.	Reason	No. of Out-of-School Children	per-centage
1.	Helping parents	638	23.19
2.	Poverty	429	15.59
3.	Migrants	374	13.60
4.	Non-availability of schools	300	10.91
5.	Lack of interest on part of the parents	264	9.60
6.	Employed as domestic servants	216	7.85
7.	Lack of interest on the part of the child	195	7.09
8.	Physical disability	193	7.02
9.	Employed in unregistered establishment	47	1.71
10.	Employed in registered establishment	28	1.02
11	Continuous failure	12	0.44
12	Reason unspecified	55	2.00
	Total number of out of school children	**2751**	**100**

The chart indicates that :
1. Majority of children who remain out-of-school are either those who are required to help the parents or the parents show no motivation to get their children enrolled in school. Such children are 902 out of a total of 2751 school children. They covered a large percentage of 33.12. Other contributory factors are poverty-leading children to work as domestic servants, or work in registered or unregistered establishments, which covers a percentage of 33.44, covering 920 children.
2. Thus 1822 children out of 2751 out-of-school children remained even unenrolled in the state due to reasons for which they were not directly responsible.
3. Another portion of such children to remain out-of-school cover 300 children who were compelled to be out-of-school due to non-availability of mother tongue as teaching

medium in schools. The children having their mother tongue as Kannada, Telugu or Tamil (mostly immigrated) face this situation.

4. Very few children showed a lack of inclination to go to schools and only 12 children left the school due to continuous failure.

The above data is not very encouraging. It is still remarkable that 413 children were brought into the fold of school education.

In this scenario the state opened non-formal education [NFE] centres to facilitate schooling to the out-of-school children of the state. The state also has been running Open School Centres to provide education to the children up to standard X with the help of National Open School.

The state has a very few NFE centers as shown below with their enrolment.

Table 3.5 : NFE Centres With Instructors And Enrolment

No. of NFE Centres				No. of Instructors		Enrolment					
				Rural	Urban	Rural			Urban		
Type	Rural	Urban	Total	Total	Total	Boys	Girls	Total	Boys	Girls	Total
						28 (6-11)	33 (6-11)	61	00	00	00
Govt.	05	00	05	05	00	13 (11-14)	13 (11-14)	26	00	00	00
Voluntary Agencies	00	00	00	00	00	00	00	00	00	00	00
Total	05	00	05	05	00	41	46	87	00	00	00

The above figures are taken from the Sixth All India Survey, which show that there are only five centres managed by the state government. All the five centers were run in the rural area of the state. Among the 87 children enrolled in these centres, there are 46 girls and 41 boys. In spite of the marginal existence of the NFE centers and a very marginal response to them, the state developed learning materials to enable the learners to enter into the formal set up at a convenient stage.

The UNICEF Project III supported efforts of material development since 1983. The material was developed in the subject areas like Language [Marathi] and Mathematics. The

medium of instruction was Marathi. The preface says that the books were prepared for the children who had left schools and adults who could not receive formal education in schools. The State Institute of Education also prepared a condensed course for the out-of-school children in the age group of 6-14. The content of the textbooks prepared for the learners had the element of familiarity, variety and simplicity. The contents were elaborated with impressive illustrations. The books were prepared under the UNICEF Project III-DACEP.

Positive attempts are providing alternative schooling facilities could help it to check the increasing dropout rate in the state.

Section III : Education of Children with Special Needs

There are 147 children enrolled in five different institutions imparting education up to Upper Primary Stage. One out of these five institutions imparts education only to boys while others have a co-educational set up. Out of 147 students 99 students are deaf and dumb while 48 children are mentally retarded. All the institutions are functioning in the urban area.

The following institutions are involved in the education of children with special needs.

Table 3.6: Names of the Institutions with Managements Involved in Special Education

S. No.	Name of the Institution and Management
1.	Sanjay School, Porvorim Managed by the Provedoria-Goa
2.	Caritos, Old Goa NGO
3.	Gujarthi Samaj School, Margao NGO
4.	People's High School, Panaji Private Management
5.	Lok Vishwas Pratisthan, Ponda

These schools are following the state curriculum while specific facilities catering to learning needs according to the nature of disability, are also provided to the children.

The State Government may have to take steps to systematise this area of education in its efforts at providing Education for All. In the background of high literacy rate in the state and over all spread of education at all levels, some serious consideration is required to promote benefits of education to the neglected areas.

CHAPTER 4

Secondary and Senior Secondary Education

The growth and development of elementary education and the literary status of Goa, in the last 40 years of liberation, notable are achievements of the state. Secondary and Higher Secondary Education in the state also indicate growth and development proportionate to the elementary education. Besides, all out efforts are made by the State to keep pace with educational movements at the national level, and its responses to the interventions of the national agencies are prompt and positive. This chapter seeks to trace the growth and development of Secondary and Higher Secondary Education in the state in terms of number of institutions, enrolment and other important factors such as vocationalisation. An effort is also made to understand the impact of the state policies and programmes on education at this stage.

Before going into details, it can definitely be said that Secondary and Higher Secondary Education in the state, like elementary education, started growing from a very small number of institutions and enrolment with limited resources and has spread to the present magnitude when the resources became available.

Growth of Secondary Education

There were only 95 Secondary Education Institutions in the state at the time of liberation. There were no middle schools at that time. The institutions imparting secondary education during Portuguese regime were known as Lyceum. The medium of instruction in the Lyceums was Portuguese. After liberation these institutions were closed or converted into English medium schools. The following Table indicates the growth of Secondary Schools since 1961.

Table 4.1 : Growth of Secondary Education in the State since 1961
(Number of institutions)

Year	Govt.	Non. govt.	Total
1961	—	—	95
1971	—	—	209
1981	29	238	267
1991	66	272	338
2001	77	288	365

This table indicates that the number of schools showed a remarkable increase during the period from 1961 to 1971. The growth also corresponds to the growth in enrolment in the secondary schools over these years.

Table 4.2 : Average Area and Population Served by Secondary Schools

Year	Average Area Served in kms	Average Population Served
1961	38.96	5268.90
1971	20.94	4740.33
1981	15.22	4047.18
1991	10.45	3697.00
2001	10.14	1396.15

Earlier, there was one Secondary School in an average area of 38.96 sq. km, when there were very limited educational opportunities for Higher Education in the State. With the spread of Primary and Middle School Education growth in turn out for Secondary Education led to opening of more high schools. At present a high school serves an area of 10.14 sq. km and a population of 1396.15. In other words, it means that there is a high school in every vicinity in the State.

Table 4.3 : Secondary Schools: Enrolment
(Classes – VIII to X)

Year	Enrolment								
	General			*SC*			*ST*		
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
1961	—	—	9511	—	—	—	—	—	—
1971	19633	11384	30447	—	—	—	—	—	—
1981	24482	18634	43116	448	227	675	46	10	56
1991	37087	31967	69054	448	287	735	21	.08	29
2001	33801	30377	64178	600	480	1080	21	18	39

The enrolment seems to be on the rise up to 1991, but in spite the growth in the number of schools during the period from 1991-2001 [from 338 to 365] the enrolment has come down. This also reflects the decline in the enrolment at elementary stage.

The comparison of the boys and girls enrolment shows that the difference has kept on reducing during these years. The following graph illustrates this aspect.

Graph 4.1 : Comparative Enrolment of Boys and Girls at Secondary Stage since 1971
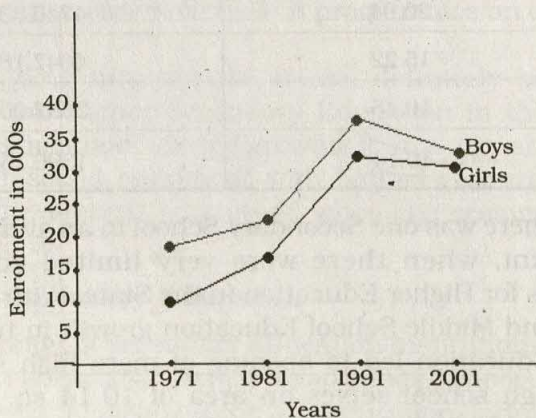
The difference of the girls' enrolment with boys' enrolment since 1971 is as shown below. The percentage of total enrolment in the year also shows the difference of the girls' participation in school education.

Table 4.4: Comparison of the Boys' and Girls' Enrolment in Terms of Enrolment Difference and its Percentage to the Total Enrolment

Year	Enrolment Difference	Total	Percentage
1971	30447	8229	27.02
1981	33116	5848	17.65
1991	69064	5120	7.41
2001	64178	3424	5.33

This table also shows that with the rise in the enrolment in the decade of 1981-91, the girls' participation also increased maintaining the trend of reducing the difference between boys and girls. The boys-girls enrolment ratio in the secondary stage from 1971 to 2001 is as shown below in the table.

Table 4.5 : Boys and Girls' Enrolment Ratio

Year	Girls	Boys	Ratio
1971	11384	19663	1:1.72
1981	18634	24482	1:1.31
1991	31967	37087	1:1.16
2001	30377	33801	1:1.11

The enrolment ratio between boys and girls shows that:

❖ The disparity in the enrolment of boys and girls has been very marginal since the time of Liberation of the State. In 1961 one girl was enrolled against less than two boys [1:1.72] in high school.

❖ There is a decline in this disparity. The ratio constantly came down and in 2001 it is almost 1:11 as against the enrolment of one girl, 1.11 boys are enrolled.

The following table shows the number of teachers in the secondary schools during the last 40 years of liberation.

Table 4.6 : Number of Teachers in Secondary Schools by Sex and Training [1961 to 2001]

Year	No. of Teachers								
	Trained			Untrained			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1961	The figure Showing The Break up the are not available								1089
1971	758	633	1931	618	446	1064	1403	1079	2482
1981	1154	695	1849	206	128	334	1360	823	2183
1991	1797	1491	3288	194	150	344	1992	1641	3633
2001	1735	1813	3548	23	23	46	1758	1836	3594

The figures showing the break up are not available

The above table shows that:

❖ In the year 1971, there was equal number of trained and untrained teachers as 42.86 per cent teachers were yet to be trained.

❖ The number of female teachers was less than the male teachers during the period from liberation to 1971.

❖ The number of untrained teachers declined gradually as the years passed. The percentage of untrained teachers as against the total number of teachers during the years after 1971 declined as shown in the above table.

Table 4.6.1 : Decline in the Number if Untrained Teachers since 1981 (base Year 1971)

Year	Percentage Of Untrained Teachers
1981	15.30%
1991	9.46%
2001	1.29%

According to the table:

❖ During the period from 1991-2001 the number of teachers in the state seems to have declined.

❖ The number of female teachers is almost the same as the male teachers over these years.

The results of SSC Examination for last five years are as shown in the following table:

Table 4.7 : Results of SSC Examination of Last Five Years

Year	No. of students			No. and percentage of students in the percentage range of marks			
	Appeared	Passed	Pass%	Over 90%	75-90%	60-75%	45-60%
1996	17065	11534	67.59	906[7.85]	2071[17.95]	3674[31.85]	4885[42.33]
1997	16382	11766	71.76	1113[9.46]	2357[20.04]	3822[35.51]	4464[37.97]
1998	16387	12182	74.34	1075[8.82]	2597[21.31]	4080[33.49]	4430[36.36]
1999	15819	9298	58.74	808[8.69]	1652[17.76]	2707[29.11]	4131[44.42]
2000	16444	10932	66.48	961[8.97]	2178[19.92]	3452[31.57]	4341[39.70]
2001	16439	11037	67.14	1117[10.12]	2362[21.40]	3229[29.25]	4329[39.22]

The comparison between the performance of Government and aided institutions is given here below:

Table 4.8 : Pass Percentage [Class X]

Year	Govt.	Aided
1996	48.39	70.37
1997	50.31	74.62
1998	52.12	78.17
1999	29.32	62.62
2000	41.43	66.09
2001	40.27	71.36

Structure of Secondary Education

The state had 476 Primary Schools and 95 High Schools at the time of liberation in 1961. There were high schools imparting education in Portuguese medium which, after liberation were either closed down or converted in to English Medium Schools. There were also high schools, which imparted education in Marathi. There were no Middle Schools in 1961 and the structure had only two stages i.e. Primary and High Schools. By 1971, middle school system was evolved and the structure in the school education was as shown in the following table:

Table 4.9: Structure of School Education

Stage	Classes	Years of Duration
Primary	I to IV	4
Middle	V to VII	3
Secondary	VII to XI	4
Total Period of School Education	—	11

In 1975, the state adopted the 10+2+3 pattern in accordance with the Kothari Commission's recommendations and the first batch of Class XII (HSC) passed out in 1977. This change in situation added to difficulties faced by the higher education institutions, which are elaborated in details in the following pages in this chapter.

The school education thus attained the present structure as shown below:

Table 4.9.1 : Present Structure of School Education

Stage	Classes	Years of Duration
Primary	I to IV	4
Middle	V to VII	3
Secondary	VII to X	3
Higher Secondary	XI to XII	2
Total Period of School Education	—	12

The table shows that the school education structure underwent changes at different times as a result of change in educational policy at the Centre and State level.

English is medium of instruction in the state from Class V onward, and majority of schools impart education in English irrespective of the child's medium of instruction at primary stage.

The National Policy of Education '86 and the Programme of Action' 92 brought changes in the school education. In 1994 the state introduced the NCERT textbooks from Class VIII except in languages. The Goa Board of Secondary and Higher Secondary Education introduced a number of vocational courses for +2 level studies and included computer education as one of the subjects from Class VIII.

Higher Secondary Education

The state had only one Higher Secondary School at the time of liberation. One of the *lyceums* that functioned during the Portuguese rule continued to exist in the form of the first ever Higher Secondary School after liberation. The State Government managed this school. It was affiliated to the Central Board of Secondary Education (CBSE).

Growth of Higher Secondary Education

The state had the old pattern of school education till 1975. According to that pattern the school education was of eleven years and SSC Examination was conducted by the Poona Board of Secondary Education, Pune till 1975, when the Goa Board of Secondary and Higher Secondary Education came into existence. This also coincided with the entry of the first batch into the +2 stage after passing SSC Examination at the end of Class X. The Goa Board conducted its first SSC Examination at the end of Class X in 1976 and in the following year it conducted the first HSC (XII) examination.

The growth and development of Higher Secondary Education in the State gives a very encouraging picture to the mosaic of School Education.

Number of Institutions

The following table shows the numerical growth of Higher Secondary institutions since 1961.

Table: 4.10 : Number of Higher Secondary Schools since 1961

Year	Number of Institutions		Total
	Govt.	*Non-govt.*	
1961	1	—	1
1971	—	—	—
1976	—·—	—	6
1981	6	1	7
1991	6	5	11
2001	9	71	80

Besides the state run Higher Secondary Schools, two Higher Secondary Schools, one each managed by the Navodaya Vidyalaya

Samitee and the Kendriya Vidyalaya Sanghatan are also functioning in the State. The table shows that the number of Higher Secondary Schools grew tremendously in the decade of 90's. The number of Government Higher Secondary Schools grew just by three but the private managements came forward to open Higher Secondary Schools in recent years. The Higher Secondary Schools provide education in the following streams: Arts, Commerce, Science and Vocational.

The number of institutions providing streamwise education is shown in the following table:

Table 4.11 : Number of Institutions Providing Education in Various Streams (2000-2001)

Stream	No. of Institutions		Total
	Govt.	Non-govt.	
Arts	9	57	66
Science	8	30	38
Commerce	9	60	69
Vocational	8	31	39

The number also shows that there are institutions, which impart education in more than one stream. The chart also shows that the number of institutions imparting Higher Secondary Education has tremendously grown. It would be interesting to know the number of students in the state taking benefit of this facility and the number of teachers employed in the Higher Secondary Schools. The following chart provides the details.

Table 4.12 : The Enrolment of Boys and Girls in the Higher Secondary Schools since 1981

Year	Enrolment								
	General			SC			ST		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1981	4335	3057	7392	22	14	36	3	0	3
1991	10806	8085	19493	95	52	147	18	1	19
2001	10742	10261	21803	138	76	214	5	4	9

The table shows that:

❖ The number of boys and girls has a marginal difference in their enrolment in Higher Secondary Schools. The decade wise figures show that the difference in the enrolment of boys and girls has been decreasing.

Table 4.13 : Decade-wise Difference in Boy-Girl Enrolment at Higher Secondary Stage

Year	Enrolment difference	Percentage to the total Enrolment
1981	+1278 boys	17.28
1991	+2721 boys	13.95
2001	+481 boys	2.29

The difference is very minor in the year 2001.
❖ The number of boys' enrolment has declined in the year 2001. It was 10806 in 1991. It came down 10742 in the year 2001. The fall is of 64. It is to be noted that the number of girls' enrolment has substantially increased as compared to the girls' enrolment in 1991. In 1991, 8085 girls were enrolled in Higher Secondary Schools. In 2001 the number shows a rise of 2176 with 10261 girls enrolled. The percentage of the increase is 11.86, which maintains the trend of rise in girls' enrolment since 1981. The rise in enrolment of girls in 1991 was 5028 with a percentage of 45.12. The trend, thus confirms enthusiastic participation of girls in educational process in the state.

The HSC results in last 5 years show that there are qualitative changes in the students' performance in the public examinations.

Table 4.14: HSC Results for Last Five Years

Year	No. of Students			No. and % age of students in % age range of marks			
	Appe-ared	Pass-ed	Pass%	Over 90%	75-90%	60-75%	45-60%
1996	10162	6573	64.68	262[2.58]	1268[12.48]	3837[37.76]	1206[11.86]
1997	10624	8008	75.38	467[4.31]	2010[18.97]	4432[41.72]	1103[10.38]
1998	10323	7656	74.16	423[4.09]	1906[18.46]	4302[41.67]	1025[9.93]
1999	10624	7577	71.32	508[4.78]	2209[20.79]	4031[37.95]	829[7.80]
2000	10759	7804	72.53	[5.29]	[20.02]	[38.46]	[8.76]
2001	9396	8069	85.88	633[6.74]	2668[28.29]	4040[43.00]	738[7.85]

Table 4.15 : Pass Percentage [Class XII] Comparative Perspective of Government and Aided Schools

Year	Govt.	Aided
1997	74.76	73.99
1998	60.53	82.51
1999	52.88	96.04
2000	77.43	74.76
2001	80.15	87.21

The table shows that:

❖ The performance of the Non-government Higher Secondary Schools is better than the Government Higher Secondary Schools.

❖ The profile of the teachers teaching in the higher secondary schools in terms of sex and training would make its role clear in up-building of the quality of education at this stage.

Here is the table that shows the numerical growth in teacher population employed in the Higher Secondary Schools.

Table 4.16: Number of Teachers in Higher Secondary Schools by Sex and Training since 1975

Year	No. of Teachers						Total		
	Trained			Untrained					
	Male	Female	Total	Male	Female	Total	Male	Female	Total.
1975	—	—	—	—	—	—	—	—	—
1981	83	26	109	19	14	33	102	40	142
1991	275	191	466	155	125	280	403	316	719
2001	568	533	1101	107	108	215	675	641	1316

This table shows that:

❖ The number of teachers employed in Higher Secondary Schools is increasing substantially since 1975. The number increased by 577 in 1991 as compared to 142 teachers in 1981. It grew again by 719 in the following years after 1991 and rose to 1316.

❖ So far as difference in male female break-up is concerned, it shows that:

❖ In 1981 only 40 female teachers as against 102 male teachers were working in Higher Secondary Schools. The

males outnumbered the female by 62. The total number of teachers had among them 28.15 per cent female teachers.

❖ In 1991 there was increase in the numbers of both the female and the male teachers as compared to that of 1981. The number of male teachers increased by 301 teachers while 276 female teachers were added. Now, there were 316 female teachers forming 43.94 per cent of the total 719 teachers in this year.

❖ The growth in number still continued and a total of 675 male teachers with an addition of 272 were working in the Higher Secondary Schools in the year 2001. There was an addition of 325 female teachers with a total of 641 in this year. The female teachers formed 48.70 per cent of total teachers.

❖ It can be seen from the table that the difference in the number of male and female teachers had been reduced.

❖ The training wise details of teachers in the table show that the number of untrained teachers is not very substantial. There were 33 untrained teachers including 14 females in the year 1981, and form 23.23 per cent of the total number of teachers.

❖ In the following decade the number of untrained teachers formed 38.94 per cent portion of the total 719 teachers. This included 125 women, which was just less by 30 as compared to male untrained teachers.

❖ The untrained teachers in the year 2001 were gender wise almost equal in number when out of 215 teachers 108 were female and 107 were male. The portion of untrained teachers during the year 2001 was 16.33 per cent of total teachers working in 80 Higher Secondary Schools. Thus the problem of untrained teachers is not of great magnitude.

The following table shows the teacher-pupil ratio since 1981.

Table 4.17 : Teacher-pupil Ratio in Higher Secondary Schools

Year	No of Teachers	Pupil Enrolment	Ratio
1981	142	7392	52
1991	719	19493	27
2001	1316	21003	16

This table leads to the conclusion that the teacher-pupil ratio is 1:16 during the year 2001 and hence it could be said that it is quite proportionate to teacher-pupil ratio at the lower stages.

The average area and population served by Higher Secondary Schools in this state is given in the following table.

Table 4.18 : Average Area and Population Served by a Higher Secondary School since 1975

Year	Average area served in sq.kms	Average population served
1981	241.19	1,11,972
1991	86.09	29067
2001	46.28	14621

According to the table it could be concluded that by 2001 there was one Higher Secondary School in an area of 46 sq km. Taking into account the transport facility available in the state, the distance is quite viable and thus Higher Secondary Education in the state has come within the reach of every child. The Higher Secondary Education still suffers problems related to quality improvement such as teacher training and competency building.

The Planning Board of Goa has made the following recommendations to improve quality of education at Secondary and Higher Secondary Education.

An expert committee of educationists should be constituted to look into the various shortcomings in this system pointed out (section 2.1.2) to be in tune with the National Policy on Education 1986 (revised 1992) and recommend speedy measures to be undertaken, particularly in respect of-

❖ Upgrading the syllabus to the NCERT standard.
❖ Physical de-linking of higher secondary school from colleges.
❖ Emphasizing value education, character building, sports, and social service and extra curricular activities.
❖ Counseling and guidance to all the students.
❖ Increased use of computers and IT in school education.

This would also help in inculcating a competitive spirit among the students and develop their personality.

❑ It may be a good idea to invite reputed schools with proven record from other parts of India to set up model schools, at least in chosen locations in the state, on a self-financing basis and without grant-in-aid.

❑ An assessment and accreditation committee may be set up by the State Government to evaluate the working and performance of secondary and higher secondary schools and granting them performance ratings. This would enable a good competition among the schools, which in turn, can be expected to keep the education system vibrant and dynamic.

❑ A standing committee of educationists and administrators may be set up by the State Government to consider the changes in education taking place in India and other parts of the world and initiate suitable advance actions in the State.

Vocationalisation

Sub-committee on Education of the Planning Board of Goa observes in the draft report that vocational area has received good attention in the state for many years. The report points out that many Higher Secondary Schools in the state have facilities for vocational education. The scheme of vocational education was started in the academic session 1988-89. Under the scheme, 12 vocational courses were started in 35 Higher Secondary Schools. The committee provides details of 23 institutions offering vocational and technical education in 1998-99 with an enrolment of 5593.

There are separate cells functioning for promotion of vocational education in the Directorate of Education and in the Goa Board of Secondary and Higher Secondary Education. The administrative functions such as introducing vocational courses, identifying and mapping institutions of opening vocational streams, providing financial assistance to such institutions and carried out by the Vocational Educational Cell in the Directorate of Education. The cell is looked after by the top ranking officers like Deputy Director of Education and Assistant Director of Education. Recently, the cell has taken steps to encourage computer education in the high schools and higher secondary schools.

It is worthwhile to note in this context that almost all institutions in the state are provided with computers and children are given basic computer education so as to develop in them computer literacy and competency to operate computers.

The vocational cell functioning at the Goa Board of Secondary and Higher Secondary Education looks after the tasks of making suitable curricular provisions and working out evaluation

procedures for assessment of students. The board has made provisions for following vocational courses –

1) Introduction of the world of work
2) Use of common tools
3) Maintenance and production of school science apparatus
4) Maintenance and production of Teaching-learning aids
5) Maintenance and elementary repairs of radio
6) Maintenance and elementary repairs of timepieces
7) Maintenance and elementary repairs of water-pump
8) Maintenance and elementary repairs of typewriters
9) Preparation of plastic articles
10) Preparation of suitcases
11) Preparation of bread and biscuits
12) Preparation of nutritious food
13) Preparation of articles from fiber
14) Batik art
15) Elementary plumbing
16) Elementary Chemical Technology
17) Needle work, Embroidery, Knitting and Crochet
18) Farm operation
19) Poultry
20) Pisces culture
21) Horticulture
22) Bee keeping
23) Marine fisheries
24) Animal Management
25) Silk Screen Printing
26) Fabric Painting
27) Signboard Painting
28) House Decoration
29) Typewriting
30) Elements of Home Science
31) Workshop Technology
32) Engineering Science (Mechanical and Electrical)
33) Engineering Science (Electrical and Radio)
34) Elements of Agriculture
35) Elements of Book-keeping with Practical in Book-keeping
36) Elements of Commerce with practical in Commerce
37) Economics and Typewriting (commerce)
38) Drawing and Painting
39) Indian Music

40) European Music
41) Foundation course in Music
42) Theatre Art
43) Visual Art
44) Hindustani Classical Music (Vocal)
45) Hindustani Classical Music (Tabla)
46) Hindustani Classical Music (Sitar)
47) Dancing (Bharat Natyam)
48) Dancing Kathak
49) Clay Modeling and Ceramics
50) Metal Craft
51) Furniture Design
52) Textile Design
53) Interior Decoration
54) Metal fitting Craft
55) Tailoring and Cutting
56) Embroidery and Needle Work
57) Typography
58) Radio Engineering and Servicing
59) Junior Chemical Technology
60) Plastic Technology
61) Preparation of Handmade Paper
62) Preparation of Coir Articles
63) Cane and Bamboo Work
64) Fisheries
65) Clay Modeling leading to Pottery
66) Wool Work
67) Textile Technology Weaving (power)
68) Textile Technology with Dyeing, Bleaching and Engineering Drawing
69) Diesel Mechanic course
70) Photography
71) Electronics
72) Puppetry
73) Computer Application

Despite the achievement in this area, the Sub-committee of the Planning Board has mentioned that there are many limitations in this area of education and has offered following suggestions.

This programme has still to make any major impact on the educational or employment scene in Goa and utility of the programme is not clear.

Selection of deserving students with proper aptitude has to be more rigorous. Matching of vocational education with employment has yet to be made more effective. Industries/Employer organisations are not yet associated in planning/conducting these courses, placement cells at schools are still not adequate. Vertical mobility in the vocational streams for interested students is still a problem area. There are a high percentage of dropouts from this programme. Entrepreneurship training is given low priority in vocational education, and consequently there is low level of self-employment among the outgoing students, programmes are not reviewed professionally, and hence needed improvement is delayed,

The Committee urges for hands-on-experimentation, fieldwork etc. and demands more emphasis on the courses. Due to lack of these, the committee opines that skill development among the students is generally limited.

CHAPTER 5

School Infrastructure and Facilities

The growth and development of school education in this tiniest state of India has an impressive profile. The development in terms of infrastructure and ancillary facilities is also not less impressive. Most of the institutions in the state are equipped with basic amenities. At least, more than 60 per cent of school children are receiving benefits of these amenities. Still a long distance has to be trailed before total attainment in providing facilities, particularly, ancillary facilities, are provided to all schools in this state. This chapter attempts to describe the availability and utilisation of infrastructure and facilities in the institutions at all stages of school education.

Data used for this presentation is derived from Sixth All India Survey, Vol.II, Schools and Facilities. The information compiled in this volume gives figures as on 30.9.1993. Efforts, however, are also made to relate the said data with the data of the year 2000 as furnished in the Statistics at a Glance brought out by the State Directorate of Education in the year 2000-01. The figures therein are as on 30.9.2000. A detailed comparison between the position of 1993 and 2000 is not done because of non-availability of data of all aspects as on 30.9.2000. Such a comparison is desirable so far as this chapter is concerned, and it may find a place with details wherever it is felt suitable. The stream of content of this chapter will include details of availability of infrastructures and ancillary facilities in the schools of the state beginning from Primary to Higher Secondary Schools.

In case of each type of schools the indicators considered are:
1. Buildings: Types of buildings such as Pucca, partly Pucca, Kachha etc.
2. Rooms:
    a. Total number of rooms, and
   b. Rooms used for instructional purpose.

A tabulated comparative representation of a and b above is given in this chapter. It is accompanied with the graphic representation also.

3. Ancillary facilities in terms of:
   a. Drinking Water
   b. Urinals
   c. Separate urinals for girls
   d. Lavatory
   e. Separate Lavatory for girls.

Each of these items is considered further for break up into rural and urban set up of schools. Percentage is also presented, if felt suitable. The content of this chapter opens with a graph of comparative figures of total number of schools in 1993 and 2000, and concludes with the table and graph showing the number of schools lacking in ancillary facilities. This has been done in order to determine agenda for compliance of deficiencies

Graph 5.1 : Comparative Figures of Total Number of Schools in 1993 and 2000
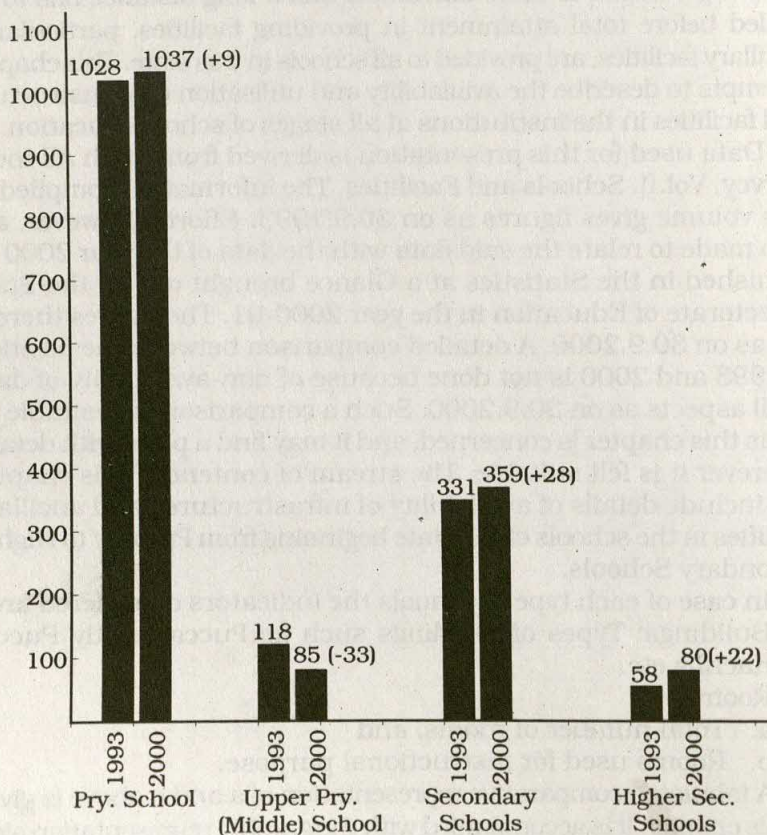
Type of Institutions by Stage of School Education

The graph shows that:
1. Only 9 primary schools were added up to 2000 to a total of 1028 primary schools as in 1993. It is likely that there was a rise and fall in this number during 6 years' interval. But it is not traced. Same thing could be said in case of other figures taken for comparison in this graph.
2. The number of upper primary schools has fallen by 33 and stands at 85 in 2000.

The total number of schools according to Area and Management as on 30.9.1993 is furnished in the table.

Table 5.1 : Total Number of Schools According to Location and Management as on 30.9.1993

S. No.	Management	Number of schools					
		Primary			Middle		
		Rural	Urban	Total	Rural	Urban	Total
1.	Govt.	798	173	971	78	19	97
2.	Private aided	19	23	42	14	5	19
3.	Private unaided	4	11	15	0	2	2
	Total	821	207	1028	92	26	118

S. No.	Management	Number of schools					
		Secondary			Hr. Secondary		
		Rural	Urban	Total	Rural	Urban	Total
1.	Govt.	50	12	62 *	2	10	12 **
2.	Private aided	152	113	265	25	18	43
3.	Private unaided	1	3	4	2	1	3
	Total	203	128	331	29	29	58

S. No.	Management	Number of schools		
		Secondary	Higher secondary	Total
1.	Navodaya Vidyalaya Samiti	2	1	3
2.	Kendriya Vidyalaya Sangathan	1	2	3

* There are no schools run by local Boards
** The total number of Secondary and Higher Secondary Schools includes the Navodaya and Kendriya Vidyalayas in the State. The details of these schools are as shown below:

3. The number of secondary and higher secondary schools has risen respectively to 359(+28) and 80 (+22). The rise in the number of Higher Secondary Schools is very significant when the average area served by these institutions is about 46 square kilometers. The rise in the number of Higher Secondary Schools is 38 per cent.

Primary Schools: Physical Facilities

The State Government provides Primary Education in the state. Out of 1028 Primary Schools, 971 schools are under the Government control. There are also Primary Schools run by Private Managements, which are aided by the State Government. Only 15 Primary Schools are unaided. Out of 971 Government Primary Schools, 798 function in rural area of the state while only 173 schools work in the urban area. Out of a total of 1028 schools 821 schools provide education in rural area. The percentage is 79.86. There is no Local Board in the state, so no school is working under the authority of the Local Board.

The following table presents the data of number of Primary Schools having the type of building.

Table 5.2 : Primary Schools by Location with Infrastructure and Facilities

Type of Building	No. of Primary Schools		Total	Percentage
	Rural	*Urban*		
Pucca	792	201	993	96.59
Partly Pucca	7	4	11	1.07
Kachha	18	2	20	1.95
Thatched Hut	4	0	4	0.39
Total	821	207	1028	100

The table indicates that:
* There is no school functioning in tent or in open space.
* 993 schools (96.59 per cent) have pucca buildings.
* 11 schools are working in partly pucca buildings.
* Only 4 schools are in thatched huts.

Steps are required to improve the condition of the schools in Kachcha buildings and those in thatched huts.

As per the position of schools in 2000, according to the *Educational Statistics at a Glance,* brought out by the

Directorate of Education, there were 1037 schools in the state. Out of these 1037 Primary Schools, 994 schools are working in Pucca buildings. The data reveals that all Primary Schools in the state have shelters and no school is held in open space or has temporary arrangement like that of a tent. The following graph gives reflection of the situation.

Graph 5.2: Number of Schools with the Type of Building by Area
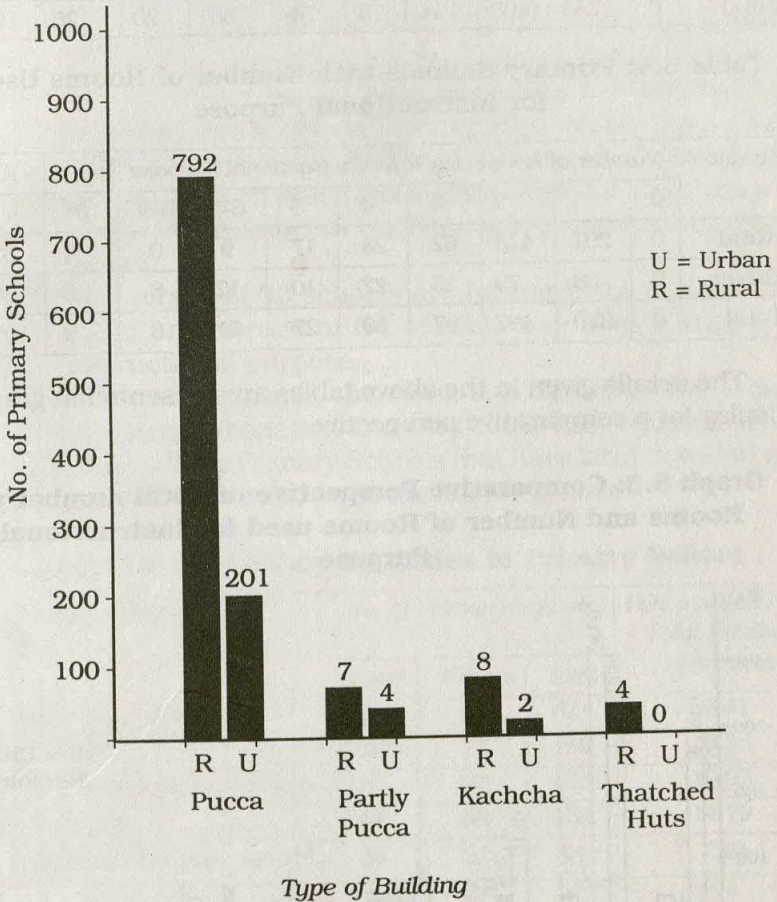
As far as the availability of rooms in the schools and their use for instructional purpose is concerned the scenario is satisfactory.

The following table presents the details:

Table 5.3: Primary Schools by Location with Total Number of Rooms and Number of Rooms used for Instructional Purpose

Area of Primary Schools	Number of Rooms									Total
	0	1	2	3	4	5	6-7	8-9	10+	
Rural	0	215	354	120	56	35	29	9	3	321
Urban	0	29	54	34	19	16	21	11	23	207
Total	0	244	408	154	75	51	50	20	26	1028

Table 5.4: Primary Schools with Number of Rooms Used for Instructional Purpose

Location	Number of Rooms Used for Instructional Purpose									Total
	0	1	2	3	4	5	6-7	8-9	10+	
Rural	0	291	418	62	23	17	9	0	1	821
Urban	0	38	79	25	27	10	12	8	8	207
Total	0	329	497	87	50	27	21	8	9	1028

The details given in the above tables are presented in graphic display for a comparative perspective.

Graph 5.3: Comparative Perspective of Total number of Rooms and Number of Rooms used for Instructional Purpose
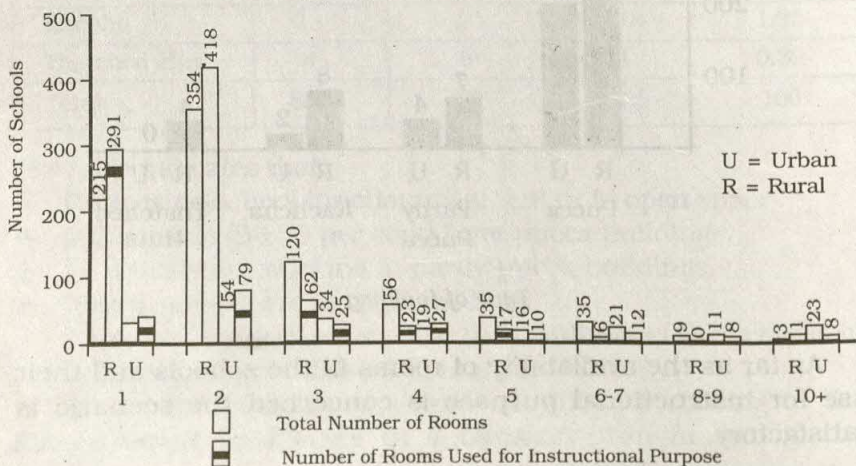
According to the graph:

❖ 458 Primary Schools have two rooms for instructional purpose. Among them 354 (86.76 per cent) are rural schools.

❖ 497 Primary Schools use two rooms for instructional purpose having in them 418 rural schools (84.10 per cent) and 79 urban schools (15.90 per cent)

❖ A minimum of 20 Primary Schools has 8-9 rooms. There are 9 rural schools and 11 urban schools. The proportion is almost equal.

❖ Only 8 schools use 8-9 rooms for instructional purpose.

❖ 244 Primary Schools have one room for their use, but 329 schools **make use of only one room for instructional purpose** which means that another eighty-five (329 – 244 = 85) schools make use of only one room though they have more than one room at their disposal.This may be due to less number of teachers or less enrolment in the school.

❖ An average of 93 schools are having three to five rooms while an average of 54 schools use 3 to 5 rooms for instructional purpose.

From the above graph, therefore, it is clear that the schools have ample accommodation and they could use it extensively.

Similarly, all the Primary Schools that have been provided with ancillary facilities are shown in the following table.

Table 5.5: Ancillary Facilities in Primary School

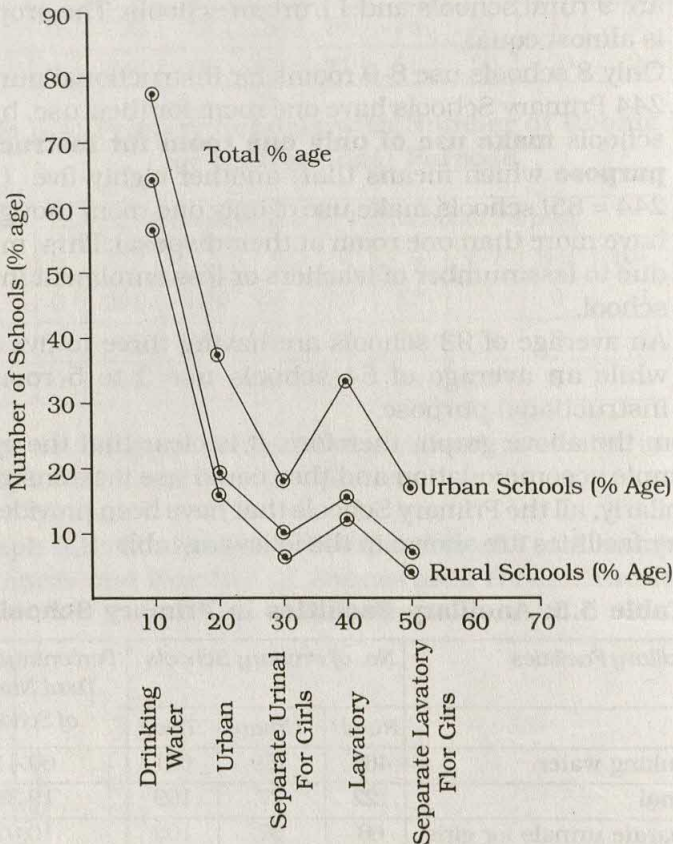| S. No.	Ancillary Facilities	No. of Primary Schools			Percentage to the Total Number of Schools
		Rural	Urban	Total	
1.	Drinking water	462	159	621	60.41
2.	Urinal	122	77	199	19.36
3.	Separate urinals for girls	66	37	103	10.02
4.	Lavatory	84	68	152	14.79
5.	Separate lavatory for girls	38	36	74	7.20

The table indicates that:

❖ 60.41 per cent schools have drinking water facility.

❖ Only 10.02 per cent and 7.20 per cent schools have separate urinal and lavatory facility for girls respectively.

❖ Out of total 1028 Primary Schools 621 schools have drinking water facilities. This means that as many as 407 schools still lack in this facility.

❖ 199 schools provide urinal facility while 152 schools make the facility of lavatory available.

The following graph depicts the scenario with more clarity

Graph 5.4: Ancillary Facilities in Primary Schools

Ancillary Facilities in Primary Schools

Upper Primary Schools: Physical Facilities

There are 118 Upper Primary Schools in the state. The number of Upper Primary Schools having pucca buildings was 115 as on 30.9.2002. The set up of Upper Primary Education is known as Middle Schools, covering standards from V to VII. The data of

infrastructure and ancillary facilities available in these schools is presented below. Most of the Upper Primary Schools function in pucca building while only two have kachha buildings. All the 118 Upper Primary Schools have a shelter to function in.

The table has details:

### Table 5.6: Upper Primary Schools by Location with Infrastructure and Facilities: Buildings

S. No.	Type of School	No. of Schools		Total	Percentage to the Total No. of Schools
		Rural	Urban		
1	Pucca	91	24	115	97.45
2	Partly Pucca	1	0	1	0.85
3	Kachha	0	2	2	1.70
	Total	92	26	118	100

The table reveals that—

❖ 97.45 per cent (115 out of 118) schools have pucca buildings.
❖ Only one school is in partly pucca building while two schools are there in Kachcha buildings.
❖ The position of Upper Primary Schools is much better as compared to that of Primary Schools.

The graph depicts this position very clearly.

Graph 5.5: Number of Upper Primary Schools by Location with Type of Buildings

Type of Building
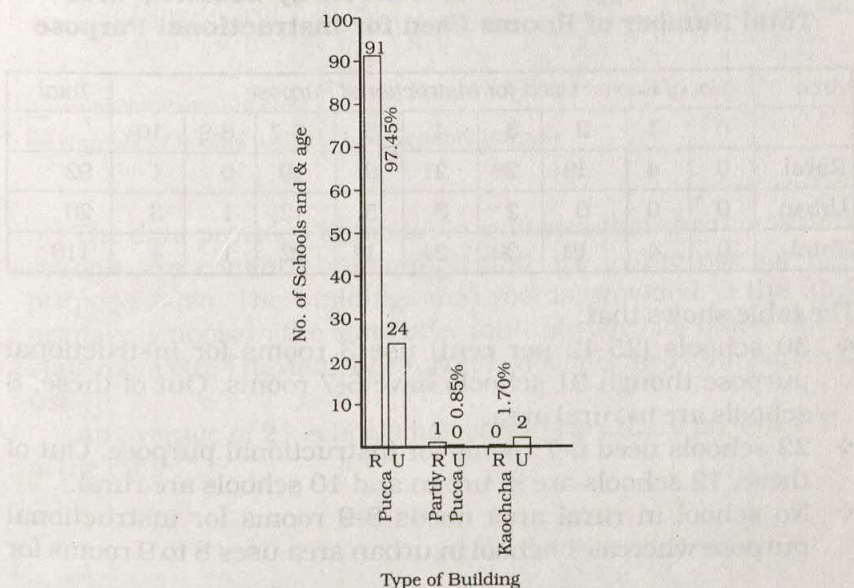
Maximum of 31 of these school buildings have 6 to 7 rooms while only 10 schools have 8 to 9 rooms. The following table gives the data.

Table 5.7: Upper Primary Schools with Total Number of Rooms

Area	Number of Rooms									Total
	0	1	2	3	4	5	6-7	8-9	10+	
Rural	0	0	15	19	11	12	23	8	4	92
Urban	0	0	0	0	1	2	8	2	13	26
Total	0	0	15	19	12	14	31	10	17	118

The table indicates that:
- There is no school with zero or one room.
- 92 rural schools (77.96 per cent) have enough number of rooms ranging from 2 to 10+.
- 26 urban schools (22 per cent) have rooms ranging from 4 to 10+
- The urban schools are more enriched in this sense.
- So far as the use of number of rooms for instructional purpose is concerned the table given below presents the position:

Table 5.8: Upper Primary Schools by Location with Total Number of Rooms Used for Instructional Purpose

Area	No. of Rooms Used for Instructional Purpose									Total
	0	1	2	3	4	5	6-7	8-9	10+	
Rural	0	4	19	28	21	9	10	0	1	92
Urban	0	0	0	2	3	5	12	1	3	26
Total	0	4	19	30	24	14	22	1	4	118

The table shows that:
- 30 schools (25.42 per cent) use 3 rooms for instructional purpose though 31 schools have 6-7 rooms. Out of these, 8 schools are in rural area.
- 22 schools need 6-7 rooms for instructional purpose. Out of these, 12 schools are in urban and 10 schools are rural.
- No school in rural area needs 8-9 rooms for instructional purpose whereas 1 school in urban area uses 8 to 9 rooms for

this purpose. It is remarkable that in all 10 schools have 8-9 rooms at their disposal while only one out two urban schools needs them fro instructional purpose while the other needs less than 8-9 rooms for instructional prupoe.

❖ All four schools in rural area use only one room for instructional purpose. It is significant because all schools in the state have more than one room.

❖ 24 schools including 21 rural schools require 4 rooms.

A comparative depiction of the total number of rooms and the number of rooms used for instructional purpose is given in the following graph:

Graph 5.6: Graph of Comparative Figures of Total Number of Rooms and Number of Rooms Used for Instructional Purpose in Upper Primary Schools

☐ Total Number of Rooms

▬ Number of Rooms used for Instructional Purpose
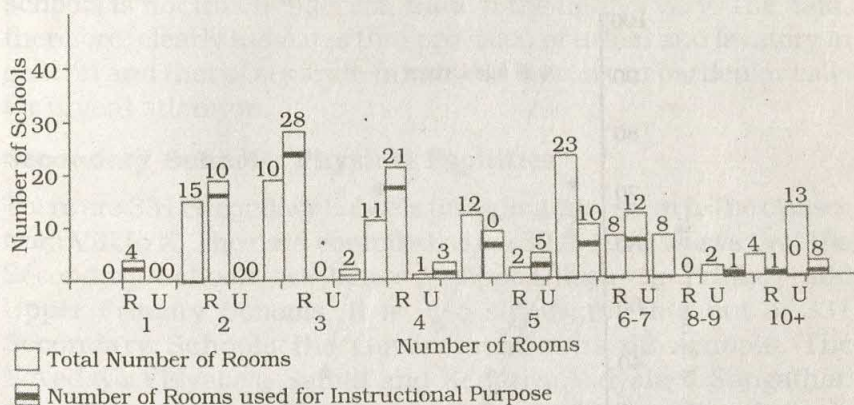
The data provided in the table indicates that the rooms in the schools are comfortably enough and are in the use for other purposes also. The buildings and rooms provided to the upper primary schools in the state offer multiple uses for office, library, staff-room etc. The data, of course, is not specified for a particular use.

An average of 21 schools has various ancillary facilities. Here is the table:

Table 5.9: Upper Primary Schools by location with Ancillary Facilities and Percentage

S. No.	Ancillary Facilities	No. of Upper Primary schools				Percentage to the No. of
		Rural	%Age	Urban	%Age	Schools
1.	Drinking water	65.	70.65	23	88.46	74.58
2.	Urinal	35	38.04	17	65.38	44.58
3.	Separate urinal for girls	18	19.57	12	46.15	25.42
4.	Lavatory	27	29.35	18	69.23	38.14
5	Separate lavatory for girls	16	17.39	10	38.46	22.3

The following graph shows the availability of ancillary facilities in upper primary schools as represented in the above table.

Graph 5.7: Graph of Ancillary Facilities in Upper Primary Schools
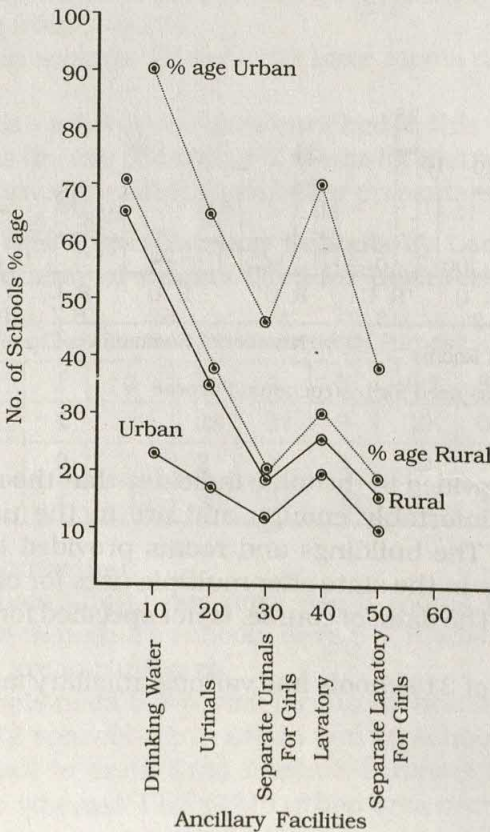
The graph indicates that:

❖ 70.6 per cent rural schools (65 out of 92) ánd 74.58 per cent urban (23 out of 26) have drinking water.

❖ Most of the Upper Primary Schools lack in the facility of separate urinal and lavatory for girls.

❖ Less number of schools provides facility for urinals and lavatory. They are only 35 and 27 respectively in rural area. The percentage of urban schools providing these facilities is still better, 65.38 per cent (17 schools out of 26). 69.23 per cent (18 out of 26) have these facilities.

❖ A very few schools have facility of separate urinal and lavatory for girls. 18 out of 92 rural schools and 12 out of 26 urban schools have separate urinals for girls while 16 rural and 10 urban Upper Primary Schools have separate lavatory for girls.

The graphic depiction of data of primary and upper primary schools is not much different, though the figures vary. The data, therefore, clearly indicates that provision of urinal and lavatory in general and that of separate urinal and lavatory in particular calls for urgent attention.

Secondary Schools: Physical Facilities

There are 331 Secondary Schools providing education to the classes from VIII to X. The data compiled as on 30.9.1993 shows that the Secondary Schools are better equipped than the Primary and Upper Primary Schools. It is also significant that out of 331 Secondary Schools the Government runs 62 schools. The Navodaya Vidyalaya Samiti and Kendriya Vidyalaya Sangathan govern three of them. This means, there are 59 Secondary Schools of the State Government and 269 schools are under private managements. Only four of these schools are (as on 30.9.1993) unaided. According to the statistics as on 30.9.2000 the increase in the number of Secondary Schools reaches the tally of 359. This is an addition of 28 schools. Latest position is not available. Most of the secondary schools are housed in pucca buildings while only one function in a Kachcha building,

The following table shows the details:

Table 5.10: Secondary Schools by Location with Infrastructure and Facilities : Buildings.

S. No.	Type of Building	No. of Secondary Schools		Total	Percentage
		Rural	Urban		
1.	Pucca	194	123	317	95.77
2.	Partly Pucca	8	5	13	3.93
3.	Kachcha	1	0	1	0.30
	Total	203	128	331	100%

The table indicates that:

❖ 95.77 per cent Secondary Schools are functioning in the pucca buildings

❖ Only 1 school is functioning in Kachcha buildings and 13 schools are there in partly Pucca buildings.

The following graph makes the position clear.

Graph 5.8: Number of Secondary Schools by Area and Type of Buildings

U = Urban
R = Rural
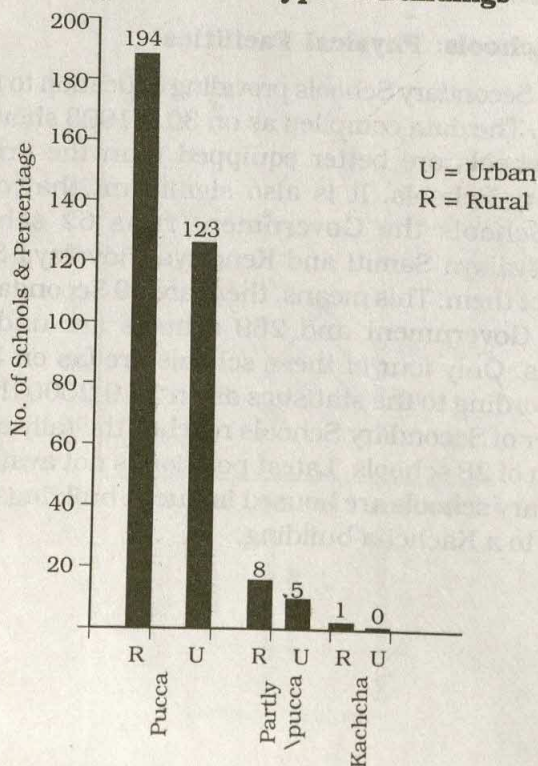
The scenario concerning the availability of rooms with the Secondary Schools and the number of rooms actually used for instructional purpose presents a tentative picture as described in the following lines. Eighty-nine out of 331 Secondary Schools have more than 22 rooms while only twenty-three schools use more than 22 rooms for instructional purpose. Among these twenty three, five Secondary Schools in rural area and eighteen Secondary Schools in urban area need to use more than 22 rooms for instructional purpose. Whereas four schools require 4 to 6 rooms for instructional activities and fifty-nine schools use 7 to 9 rooms for instructional purpose. This means that only a few schools in the State are in a position to make use of all rooms for instructional purpose.

The tables given here below provide details:

Table 5.11: Secondary Schools by Location with Total Number of Rooms

Area	No. of Rooms in secondary schools								Total
	0	1-3	4-6	7-9	10-12	13-15	16-18	19-20	22+	
Rural	0	0	3	26	51	33	28	24	38	203
Urban	0	0	1	12	10	18	20	16	51	128
Total	0	0	4	38	61	51	48	40	89	331

Table 5.12: Secondary Schools with Total Number of Rooms Used for Instructional Purpose

Area	No. of rooms in secondary schools used for instructional purpose								Total
	0	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22+	
Rural	0	5	59	38	43	28	17	8	5	203
Urban	0	5	15	21	23	18	14	14	18	128
Total	0	10	74	59	66	46	31	22	23	331

According to the above tables:

❖ Most of the Secondary Schools have minimum 4 to 6 rooms.
❖ 89 schools have more than 22 rooms.
❖ Only 4 schools have minimum number of rooms.

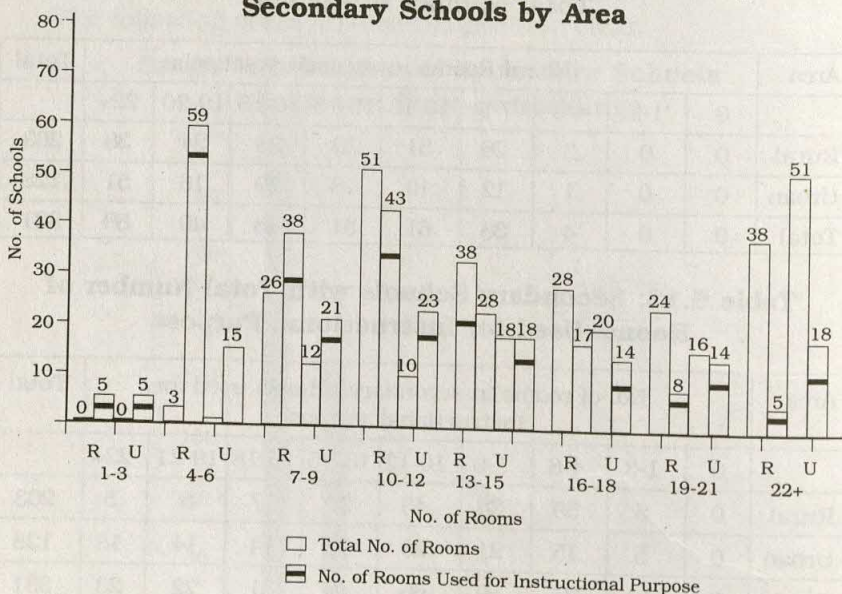These tables further indicate that all Secondary Schools have

sufficient accommodation except for 4 schools, which have only 4 to 6 rooms to accomplish their bare necessities.

The table 5.12 shows that:

❖ 10 schools use 1 to 3 rooms for instructional purpose.
❖ Only 23 schools require more than 22 rooms for instructional purpose. Among them are 5 rural secondary schools though 38 rural secondary schools have more than 22 rooms for their use.
❖ Maximum of 59 rural secondary schools use 4 to 6 rooms for instructional purpose.
❖ 61 schools have 10 to 12 rooms and 66 schools use 10 to 12 rooms for instructional purpose. This means 5 schools require more accommodation than they actually have at their disposal. The following graph gives the comparative perspective:

Graph 5.9: Comparative Figures of Total Number of Rooms and Number of Rooms Used for Instructional Purpose – Secondary Schools by Area

No. of Schools (Y-axis)
No. of Rooms (X-axis: 1-3, 4-6, 7-9, 10-12, 13-15, 16-18, 19-21, 22+; each with R and U)

☐ Total No. of Rooms
▬ No. of Rooms Used for Instructional Purpose

Most of the Secondary Schools have facility of drinking water, urinals and lavatory, but the provision for separate urinals and lavatory for girls still awaits attention even in the Secondary Schools. The data indicates that 69 per cent Secondary Schools have separate urinals for girls and 59 per cent schools have separate lavatory for girls. The position is better as compared to the Primary and Upper Primary schools in respect of the above facilities.

The table gives details of ancillary facilities below:

**Table 5.13: Secondary Schools by Location with
Ancillary Facilities and Percentage**

S. No.	Ancillary Facilities	No. of Secondary Schools				Percentage
		Rural	%age	Urban	%age	(Total)
1.	Drinking water	193	95.07	127	99.22	96.68
2.	Urinals	164	80.79	116	90.63	84.59
3.	Separate urinals for girls	133	65.52	96	75.00	69.18
4.	Lavatory	143	70.44	107	83.59	75.53
5.	Separate Lavatory for girls	115	56.65	83	64.84	59.82

This graph presents the position more clearly in terms of number of Secondary Schools and their Percentage in respect of different ancillary facilities.

**Graph 5.10: Graph of Ancillary Facilities
in Secondary Schools**
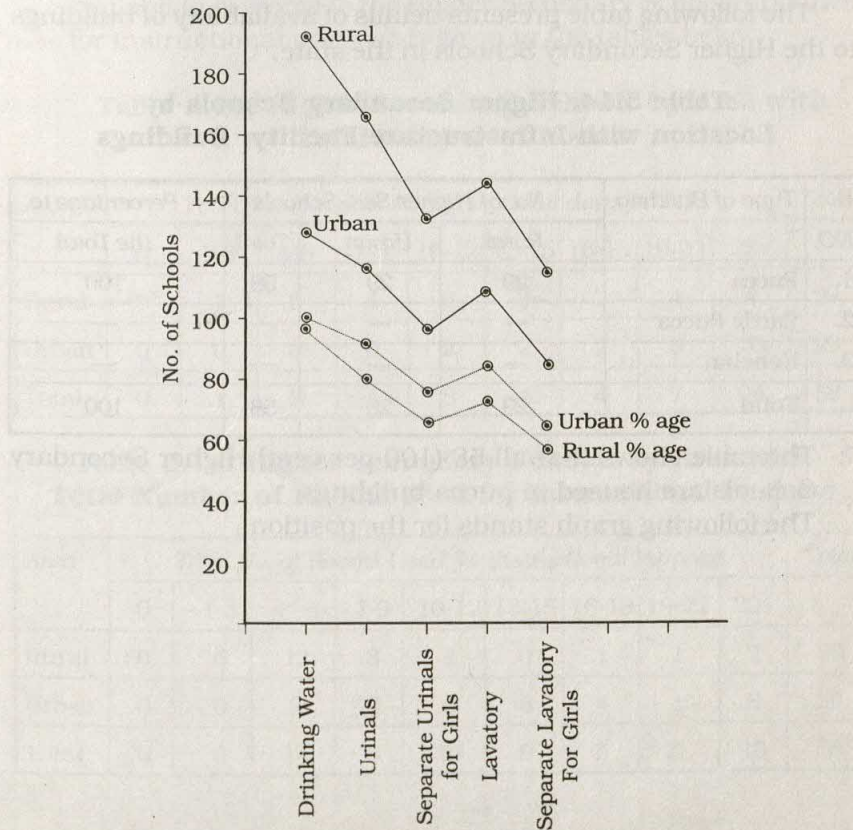
In spite of a better facility profile, the graph still resembles those of the lower stages of education in the state. It, however, indicates that steps are required to provide adequate facilities of separate urinal and lavatory for girls. The profile of facilities available in the Secondary Schools highlights the grim position of Primary Schools in respect of all ancillary facilities. Later in this chapter an attempt is made to present the scenario of schools lacking in physical facilities.

## Higher Secondary Schools Physical Facilities

There were 58 Higher Secondary Schools in the State as on 30.9.1993, which in 2000 grew up to 80. The Higher Secondary Schools in the State, as per the data used for this presentation, are in a very good position so far as the availability of facilities are concerned. Here are the tables citing the details.

The following table presents details of availability of buildings to the Higher Secondary Schools in the state.

Table 5.14: Higher Secondary Schools by Location with Infrastructure Facility: Buildings

S. NO.	Type of Building	No. of Higher Sec. Schools			Percentage to the Total
		Rural	Urban	Total	
1.	Pucca	29	29	58	100
2.	Partly Pucca	—	—	—	—
3.	Kchcha	—	—	—	—
	Total	29	29	58	100

❖ The table shows that all 58 (100 per cent) Higher Secondary Schools are housed in pucca buildings.
The following graph stands for the position.

Graph 5.11: Number of Higher Secondary Schools by Type of Buildings

Type of Building
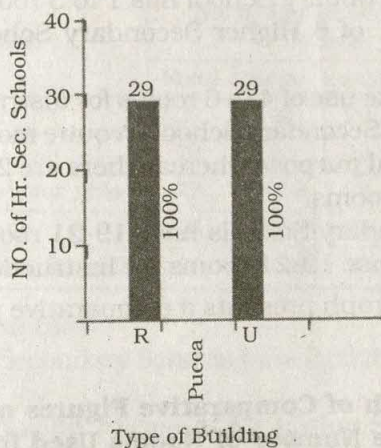
Availability of rooms to the Higher Secondary Schools and their use for instructional purpose is given in the tables below.

Table 5.15: Higher Secondary Schools by Area with Total Number of Rooms

Area	Total No. of rooms in Higher Secondary Schools									Total
	0	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22+	
Rural	0	1	6	4	6	2	2	4	4	29
Urban	0	0	0	0	2	2	2	3	20	29
Total	0	1	6	4	8	4	4	7	24	58

Table 5.16: Higher Secondary Schools by Area with Total Number of Rooms Used for Instructional Purpose

Area	Total No. of Rooms Used for Instructional Purpose									Total
	0	1-3	4*-6	7-9	10-12	13-15	16-18	19-21	22+	
Rural	0	6	12	3	4	0	1	1	2	29
Urban	0	0	2	2	6	6	4	1	8	29
Total	0	6	14	5	10	6	5	2	10	58

According to these tables it is clear that:

❖ 24 Higher Secondary Schools have more than 22 rooms.

❖ One Higher Secondary School has 1 to 3 rooms.

❖ An average no. of 6 Higher Secondary Schools has 4 to 20 rooms.

❖ 14 schools make use of 4 to 6 rooms for instructional purpose.

❖ Only 10 Higher Secondary Schools require more than 22 rooms for instructional purpose whereas there are 24 of them having more than 22 rooms.

❖ 7 Higher Secondary Schools have 19-21 rooms but only 2 of them actually use 19-21 rooms for instructional purpose.

The following graph presents a comparative perspective of the above tables.

Graph 5.12: Graph of Comparative Figures of Total Number of Rooms and the Number of Rooms Used for Instructional Purpose in Higher Secondary Schools
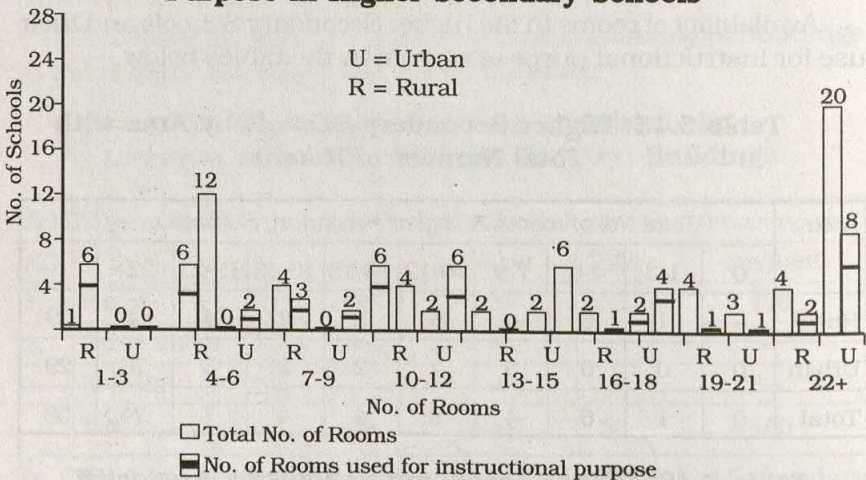
Ancillary facilities are available in almost all the Higher Secondary Schools in the State. Again, like the other set-ups of education, the graph may be lower in case of facilities of separate urinals and lavatories for girls, particularly so, in rural areas. Yet the position of Higher Secondary Schools is much more comfortable than even that of the Secondary Schools and it can be said that they are well-equipped. The following table provides data of number of Higher Secondary Schools having different types of facilities.

Table 5.17: Higher secondary schools by location with Ancillary facilities

S. No.	Ancillary Facilities	No. of Higher Secondary Schools				Percentage to the
		Rural	%age	Urban	%age	Total
1.	Drinking water	29	100	29	100	100
2.	Urinals	29	100	29	100	100
3.	Separate urinals for girls	27	93.10	28	96.55	94.83
4.	Lavatory	26	89.66	29	100	94.83
5.	Separate lavatory for girls	24	82.76	29	100	91.38

The table indicates that:

❖ All 58 Higher Secondary Schools have facilities of drinking water and urinals.

❖ (No data is available in case of the Higher Secondary Schools, which came up after 30.9.1993)

❖ 29 urban Higher Secondary Schools provide lavatories both for boys and girls separately.

❖ 26 rural Higher Secondary Schools (89.66 per cent) and 24 of them (82.76 per cent) provide separate lavatory for boys and for girls.

❖ 27 rural and 28 urban Higher Secondary Schools (in all 94.83 per cent) provide for separate urinals for girls.

Here is the graphic representation:

Graph 5.13: Graph of Ancillary Facilities in Higher Secondary Schools
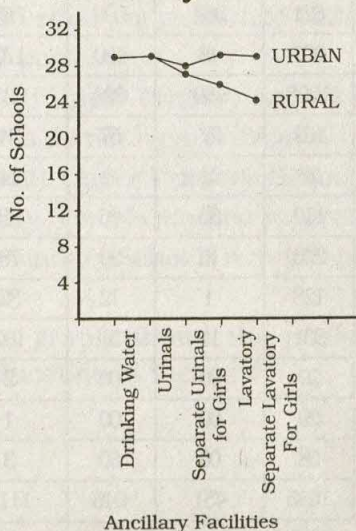
Though the latest data on physical facilities in Higher Secondary Schools are not available, the status of Higher Secondary Schools is quite high as compared to the scenario in other schools from Primary, Upper Primary and Secondary stages of education. The entire school education scenario in relation to physical facilities puts forth a very grim situation in primary schools and needs immediate attention of the Government. Contribution from the PTAs, Voluntary Agencies, and NGOs also needs to be invited to enhance the facilities in the Primary Schools. Maintenance of the physical facilities needs to be ensured.

In the light of some positive data pertaining to physical facilities available in the schools of the state, it would also be significant to study the data of the schools lacking in the physical facilities - particularly ancillary facilities.

The table presents a comparative perspective of the number of schools lacking in ancillary facilities. The primary schools occupy the higher position in the data.

Here is the table:

Table 5.18: Number of Schools of all Stages Lacking in Ancillary Facilities

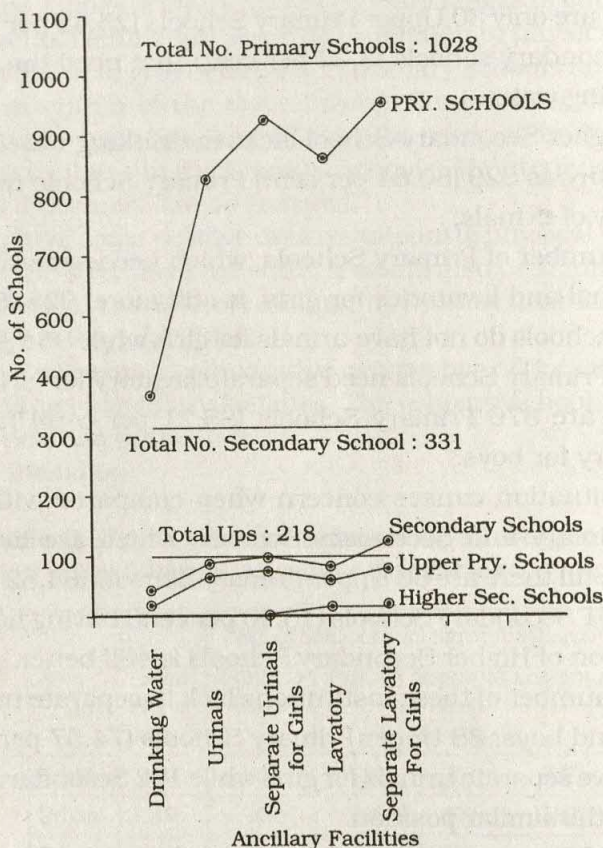| S. No.	Type of School	Area	Total No. of Schools	No. of Schools Lacking in Ancillary Facilities				
				Drinking Water	Urinal	Separate Urinal for Girls	Lavatory	Separate Lavatory for Girls
1.	Primary	Rural	821	362	699	755	737	783
		Urban	207	48	130	170	139	171
		Total	1028	380	829	925	876	954
2.	Upper Primary	Rural	192	27	57	74	65	76
		Urban	26	3	9	14	8	16
		Total	118	30	66	88	73	92
3.	Secondary	Rural	203	10	39	70	60	88
		Urban	128	1	12	32	21	45
		Total	331	11	51	102	81	133
4.	Higher secondary	Rural	29	00	00	2	3	5
		Urban	29	00	00	1	00	00
		Total	58	00	00	3	3	5
		Total	1635	451	946	1118	1033	1184

The table indicates that:

❖ Still 410 (36.96 per cent) Primary Schools are 'thirsty' for want of drinking water.

❖ There are only 30 Upper Primary Schools (25.42 per cent) and 11 secondary schools (3.32 per cent) that need the facility of drinking water.

❖ No Higher Secondary School lacks in drinking water facility.

❖ As many as 829 (80.64 per cent) Primary Schools require the facility of urinals.

❖ The number of Primary Schools, which need separate facility of urinal arid lavatories for girls, is still more. 925 (89.98 per cent) schools do not have urinals for girls while 954 (92.80 per cent) Primary Schools need separate lavatory for girls.

❖ There are 876 Primary Schools (85.21 per cent) having no lavatory for boys.

This situation causes concern when compared with that of Upper Primary and Secondary Schools, which are in a better position. Still there are 66 Upper Primary Schools (64.82 per cent) and only 51 Secondary Schools (15.40 per cent) having no urinals. The position of Higher Secondary Schools is still better.

❖ More number of these institutions lack in separate urinals for girls and boys. 88 Upper Primary Schools (74.57 per cent) do not have separate urinals for girls while 102 Secondary Schools are in the similar position.

❖ 73 (61.86 per cent) Upper Primary and 81 (24.47 per cent) Secondary Schools do not have lavatories.

❖ 92 (77.96 per cent) Upper Primary Schools and 133 (40.18 per cent) Secondary Schools have no separate lavatory for girls.

❖ Only 3 Higher Secondary Schools require separate urinals and lavatory for girls.

The comparative graph shows the position of schools at different stages of education in the state.

Graph 5.14: Graph of Total Number of Institutions at Different Stages of Education Lacking in Ancillary Facilities

Total No. Primary Schools : 1028

PRY. SCHOOLS

Total No. Secondary School : 331

Total Ups : 218

Secondary Schools

Upper Pry. Schools

Higher Sec. Schools

No. of Schools

Drinking Water

Urinals

Separate Urinals for Girls

Lavatory

Separate Lavatory For Girls

Ancillary Facilities

In conclusion, it could be stated that:

❖ Primary Schools in the State require immediate attention for making ancillary facilities available.

❖ Facilities for separate urinals and lavatories for girls need to be provided in all types of schools as majority of them are deprived of these facilities.

Maintenance and timely repairs of the existing facilities would also be equally important.

Development of the School Curriculum

The state followed Maharashtra State curricula for all the stages of education since Liberation, until it was able to develop its own curricula to catering aspirations and needs of Goan children and society. In 1975, two important academic agencies were set up in the state. One of them was the Goa Board of Secondary and Higher Secondary Education and the other was the State Institute of Education. The responsibility of framing curriculum and relevant instructional material was vested with these agencies. The State Institute of Education took up the task of framing curriculum and developing instructional material, including textbooks for elementary education, while the Board carried out the task of framing curriculum for Secondary and Higher Secondary Education. The Board, however, did not produce textbooks except for the local languages like Marathi and Konkani.

This chapter describes the stages of development of curriculum and instructional material since 1979. It also stipulates the important considerations in developing curricula and curricular materials. This chapter also attempts to trace the level of adoption and adaptation of NCERT syllabus in the total curriculum framework.

The material presents the course of curriculum development in the state through the stages of education from Primary to Higher Secondary. Mention is also made to the ongoing attempts to design pre-school curriculum in the following pages. The task was recently taken up by the State following a conference held under the auspices of the State Institute of Education and the Regional Institute of Education, Bhopal in June 1997.

I. Primary Curriculum

❖ **Renovation of Primary Education Curriculum**

The intervention emerged out from the urge of having a need-based curriculum and instructional materials suitable to the students in general and the first generation learner in particular. The curriculum was designed according to the NCERT guidelines. The project received financial assistance from UNICEF. The curriculum developed was based on the recommendations made in the National Policy of Education'86 and the modifications suggested in the Programme of Action '92.

The programme is termed as 'the first scientific experiment made by the state'. Approaches and strategies of curriculum development were adopted into as stipulated in NPE '86 and POA '92. The major goal of this exercise was universalisation of elementary education in the state. In this view it was considered that the curriculum needed to be simple and practical. Besides this, a very important consideration was to share the NCERT's idea of uniform primary curriculum. Yet care was taken that it addressed to the local needs. It is framed on the line of the National Curriculum Framework. Provision is also made for common core content with certain element of local specifics, at the primary stage.

Overview of the Curriculum

- ❖ It is responsive to the needs and aspirations of ever-changing Goan society.
- ❖ The curriculum is dynamic and relevant to the situation and supports functional approach.
- ❖ It aims at learning of basics for learner achievements of comparable standards at all levels.
- ❖ There is a scope for equal opportunity to all children for achievement of Minimum Levels of Learning (MLL) for each stage of education.
- ❖ It is framed on the lines of on National Curricular Framework. Provision is also made for Common Core Content with certain element of local specifics, at the primary stage.
- ❖ Curriculum for standerd V to VII is extension of the curriculum of standerd I to IV and based on the NCERT curriculum for standerd VIII to X adopted by the Goa Board of Secondary and Higher Secondary Education.

❖ Basic features of curriculum aim at development of human resources for realisation of the national goals.

❖ It is child centred and activity based.

❖ The curriculum spells out the learning objectives and also learning outcomes to enable the teachers to take up remedial measures.

❖ Exercise of classroom teaching in the process of development of curriculum has made it possible to provide a need-based programme. This has probably brought down the rate of stagnation and wastage.

A need also was felt to simplify the curriculum with the objective of preparing responsible citizens of tomorrow. The "Background" of Curriculum of Primary Education elaborates this objective stating that:

Some students leave school after fourth class of primary stage. Primary education should aim at enabling such students to proceed with their education informally that is, enabling them to enrich their knowledge by reading newspapers, books etc. At the same time it should aim at laying a sound base for further education of those students who continue in the school after standerd IV.

It holds forth:

The NCERT guidelines are in the focus for designing the curriculum steered to provide learners opportunities to participate in the learning process and to develop in them competencies to gather knowledge through self-learning. The evaluation would also be competency based–evaluation in the form of continuous comprehensive evaluation.

This curriculum also includes the ten core constituents as provided in the NPE '86. They are:

1. History of India's freedom
2. Indian constitutional duties and responsibilities
3. Preservation of National Identity
4. India's identical cultural heritage
5. Equality, Democracy and Secular Attitude
6. Equality of sexes
7. Environmental preservation
8. Eradication of social barriers
9. Necessity of limited family
10. Culmination into scientific outlook

The new curriculum of the state was designed for the Classes I to IV. It is explained in the curriculum document that—

"According to the National Policy of Education, primary education starts with the completion of 6-14 years of age. However, in Goa, as of now a 4 years and 9 months old child can get admission to standerd I. Since education starts at a tender age, in Goa, we have effected a special change..."

This background provides a cause to have 4 years' primary education instead of 5 years as envisaged in the NEP'86. Besides, it mentions that there is a special provision in the curriculum of standerd I. The syllabi are divided in two parts. First Phase consists of 8 weeks when education will be informal enabling learners to attain minimum levels of learning.

Subject Scheme and Development of Materials

The curriculum is, therefore, competence oriented and graded. The subjects included in the curriculum are according to the national curriculum. The subjects are as follows:

1. Recreation
2. Language
3. Mathematics
4. Environmental Studies
5. Healthy Life
6. Craft

As per the National Policy, mother tongue is to be the medium of instruction, in the primary schools of the state. All the other subjects are taught in mother tongue while mother tongue is also taught as one language. However, the curriculum introduces English as Second language from Class III as per the state policy. In English medium schools the regional languages Marathi/ Konkani are introduced as Second language from Class III. The State Institute of Education developed and produced instructional material such as Textbooks, Workbooks, and Teachers' Hand Books. The textbooks are produced with the major consideration that they are basically meant for children. Hence their print, colour, and size are decided according to the developmental requirements of the learners. The following chart stipulates medium and class wise provision of instructional materials at the primary stage.

Table 6.1: Marathi Medium

Category of the book	Textbooks	Teachers' Hand Book	Workbook
Standard I	1 Marathi	1 Marathi 2 Mathematics 3 Environmental Studies 4 Recreation 5 Healthy life 6 Craft	Nil
Standard II	1. Marathi	1. Marathi 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy life 6. Craft	Nil
Standard III	1. Marathi 2. Mathematics. 3. Environmental Studies	1. Marathi 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy life 6. Craft 7. Second Language **(English)**	1. Marathi 2. Mathematics 3. Environmental studies 4. Recreation
Standard IV	1. Marathi 2. Mathematics. 3. Environmental Studies 4. Second Language **(English)**	1. Marathi 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy life 6. Craft 7. Second Language **(English)**	1. Marathi 2. Mathematics. 3. Environmental Studies

Table 6.2: Konkani Medium

Category of the book	Textbooks	Teachers' Hand Book	Workbook
Standard I	1. Konkani	1. Konkani 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy Life 6. Craft	Nil

Standard II	1. Konkani	1. Konkani 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy Life 6. Craft	Nil
Standard III	1. Konkani 2. Mathematics. 3. Environmental Studies	1. Konkani 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy Life 6. Craft 7. Second Language **(Marathi/Konkani)**	1. Konkani 2. Mathematics. 3. Environmenta Studies 4. Recreation
Standard IV	1. Konkani 2. Mathematics. 3. Environmental Studies 4. Second Lang **(Konkani /Marathi)**	1. Konkani 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy Life 6. Craft 7. Second Lang **(Konkani /Marathi)**	1 Konkani 2 Mathematics. 3 Environmental Studies 4 Recreation

Table 6.3: English Medium

Category of the book	Textbooks	Teachers' Hand Book	Workbook
Standard I	1. English	1. English 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy Life 6. Craft	Nil
Standard II	1. English	1. English 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy Life 6. Craft	Nil

Standard III	1. English 2. Mathematics. 3. Environmental Studies 4. Second Language **(Marathi /Konkani)**	1. English 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy Life 6. Craft 7. Second Language. **(Marathi/ Konkani)**	1. English 2. Mathematics. 3. Environmental Studies
Standard IV	1. English 2. Mathematics 3. Environmental Studies 4. Second Language **(Marathi/ Konkani)**	1. English 2. Mathematics 3. Environmental Studies 4. Recreation 5. Healthy Life 6. Craft 7. Second Language **(Marathi/ Konkani)**	1. English 2. Mathematics 3. Environmental Studies

This curriculum was tried out in thirty selected primary schools from Quepem, Sanguem, Canacona, and Pedne taluka from 1981 on experimental basis. Changes were made in the revised edition keeping in tune with the spirit of National Policy of Education (NPE) '86. Teachers' experiences and views also were the prime consideration in effecting the changes. The Curriculum document points out that a *high level committee* was set up by the Government to examine this curriculum. The committee was presided over by the Honorable Education Minister, Education Secretary, Director of Education, and Education officers working at various levels. Some experienced teachers were also the members of this committee.

As per the recommendations of the committee, the curriculum with new textbooks was brought into use in phases in all Marathi medium Primary Schools; similar materials were developed and introduced in the Primary Schools with Konkani, English, and Urdu medium. After necessary revisions, the curriculum was brought into force class-wise each year from 1986 to 1990.

II. Curriculum for Standard V to VII

The task of renovation and revision of the Primary Curriculum lasted until 1990 when it came fully into implementation in all the

Primary Schools. This was the beginning of the process of the developing curriculum for Upper Primary Stage of Education. This stage of education is named in Goa as "Middle School Education".

The task of renewal and reconstruction of school curriculum at the elementary stage evolved development of a detailed framework of syllabus as in the National Policy of Education '86. The curriculum also provides details of content and process of teaching and learning at the Upper Primary Stage in the state.

The major consideration of revision of the curriculum was to revise the quantum and quality of learning experiences. This task was taken up in the context of the need to identify and develop among learners, minimum levels of learning that were a prime consideration in promoting mass education process. The minimum levels of learning provides base to the task of revising the curriculum.

The **Foreword** of the Curriculum document states:

"...the revised curriculum for the standerd V, VI and VII (Upper Primary) *has been so designed that at the end of standerd VII, the students attain minimum level of competencies to process their learning either in formal or informal system of education.*"

The **Foreword** further states its aim of achievement of comparable standard of learning the stage of Upper Primary Education, so that the students are able to compete in inter or intra state academic deliberations. Necessary weightage has been provided to the common core content and National Curriculum Framework as suggested by National Education Commission. Care was also taken to provide instructional material based on local scenario. The revised curriculum of Middle School education was naturally an extension of the revised and renovated Primary Curriculum.

One of the features of this curriculum is that it includes activities for Yoga Education, awareness of health hazards of tobacco use, Population Education and Value Education. These activities are brought under the subject of Value Education. The aim of the activities was to inculcate desired habits in the students at appropriate stage.

The following scheme is introduced with weightage in terms of time allocation for each subject:

Table 6.4: Subject Scheme at the Upper Primary Level

Subjects	Class-Wise Periods Per Week		
	V	VI	VII
First Language (English/Marathi/Konkani)	9	9	9
Second Language (Hindi)	5	5	5
Third Language (Konkani/Marathi/English/Urdu)	4	4	4
Mathematics	6	6	6
Science	6	6	6
Social Science (History and Civics-4, Geography-3)	7	7	7
Health and Physical Education	3	3	3
Art Education	2	2	2
Work Experience (Carpentry/ Pot Culture/ Kitchen Gardening/ Electrical/Floriculture/Home Craft/ Tailoring/ Waste to Useful/Fisheries/Clay Modeling /Paper Work/Embroidery/Coir Work)	2	2	2
Yoga Education	2	2	2
Value Education Awareness of the health hazards of Tobacco use, Liquor and Drugs, Environmental Education, Population Education, Cubs and Bulbuls for disciplined community living and value education	1	1	1
Music and Library Reading	1	1	1
Total Periods	48	48	48

There is an element of flexibility in the above arrangement periods as the heads of the schools are given freedom *to alter one or two periods for different subjects according to need.* While commenting on the teaching-learning activities, providing learning experiences through different *educational creative activities* for the students is considered essential. There is also a provision for remedial teaching and continuous and comprehensive evaluation in this curriculum. This curriculum was brought into force from 1994.

III. Curriculum for Standards VIII, IX and X

The revised curriculum for secondary stage of education came into effect provisionally from June, 1994. It is stated in the

introductory passage of the syllabus that the scheme of studies as detailed in the earlier syllabus would continue to be in use even after the revision. The revised syllabus reflects the spirit of the National Curriculum, which aimed at reducing existing disparities and regional imbalance in the course offerings, by setting specific norms for achievements.

The introductory passage points out that the syllabi articulate the educational objectives of the National System with sufficient flexibility. It leaves scope for initiatives in teaching methods as per local educational needs. There is also an emphasis on facilitating creative endeavour, inculcating scientific outlook, acquisition of work skills and learning to live. The curriculum instructs that students should be equipped with knowledge and with the required personal competencies through classroom transaction. The subject scheme in the curriculum is as given here below:

Group A: Six Compulsory Subjects.

- ❖ First language
- ❖ Second Language
- ❖ Third Language
- ❖ Mathematics (2 theory papers)
- ❖ Science (2 theory papers and practical)
- ❖ Social Science (2 theory papers and practical in Social Sciences.)

Note: The Board assesses these subjects for standerd X students through a public examination. For standerd VIII and IX, these are assessed in the school as per the scheme under *Article 10.*

Group B: Three School-based Assessment Subjects.

- ❖ Health, Sports and Physical Education.
- ❖ Any one of the following:
  1. National Cadet Corps (N.C.C.)
  2. Junior Red Cross (J.R.C.)
  3. Scouting/Guiding
  4. Community Service
- ❖ Any one of the following:
  1. Work Experience
  2. Elements of Home Science
  3. Elements of Engineering (including workshop technology)
  4. Elements of Agriculture

5. Elements of Fine Arts
6. Elements of Commerce and Book-keeping
7. Elements of Tailoring and Embroidery
8. Elements of Industrial Craft
9. Indian Classical Music (Vocal)
10. Indian Classical Music (Instrumental)
11. Western Classical Music (Instrumental)
12. Western Classical Music (Vocal)
13. Indian Music and Dance
14. Western Music
15. Theatre Art
16. Typewriting
17. Art and Craft
18. Computer Software Application
19. Economics

The Scheme also states: *The students can also opt for any other subjects permitted by the Board from time to time.*

Assessment of Subjects and Scheme of Evaluation

In the curriculum there is a provision for both numerical evaluation and grading. The school level assessments of subjects mentioned below are done at the school level and students are awarded grades. The details of the assessment scheme are given below:

I. The Subjects Assessed at School Level

❖ Health, Sports and Physical Education.
❖ Any one of the following:

1. National Cadet crops (N.C.C.)
2. Junior Red Cross (J.R.C.)
3. Scouting/Guiding
4. Community Service

❖ Any other subject from the list given in the Subject Scheme and listed above in Group B (III) from 1 to 19.

The grade is determined based on the marks obtained by the students. The total marks are 100. The grades are as shown below:

Grade A: 90 % above	Grade D: 50 % to 64%
Grade B: 80 % to 89 %	Grade E; 35 % to 49 %
Grade C: 65% to 79 %	Grade F: 34% and below.

The details of Board assessment of subjects for standerd X are as given in the following table:

Table 6.4: Details of Board Assessment Subjects for standerd X
(This refers to Article I Group A of the Board's Assessment Scheme)

S. No.	Details of Subjects	Duration of Question Papers	Maximum Marks
1.	**Language I** (Any one of the languages –English, Marathi, and Urdu as medium of Instruction	3 hours	100
2.	**Language I** - Hindi or Hindi Composite	3Hours	100
3.	**Language II** Any one of the following language Modern Indian Languages such as Konkani, Marathi, Gujarati, Kannada, and Urdu	3 hours	100
4.	**Classical Language** Such as Sanskrit, Ardhamagadhi, Arabic and Latin	3 hours	100
5.	**Modern Foreign Languages such as** German, French, Portuguese	3 hours	100
6.	**Composite Language course such as** Marathi/Konkani/Gujarati/ Kannada and aclassical language	3 hours	100
7.	**Mathematics** a) Mathematic — Paper I b) Mathematic — Paper II	2½ hours 2½ hours	75 75 150
8.	**Science** a) Science – Paper I b) Science – Paper II c) Practical in science	2½ hours 2½ hours 1½ hours	60 60 30 150
9.	**Social Science** a) Social Science –paper I (History, Civics and Contemporary India) b) Social Science – Paper II (Theory in Geography and Topical Studies) c) Practical In Social Science Paper II	2½ hours 2½ hours	75 65 10 150

The subject wise allotment of periods as envisaged in the norms of the Goa Board of Secondary and Higher Secondary Education is as shown in the following table:

Table 6.5: Subject wise Distribution of Periods for Classes VIII, IX and X

S. No.	Subjects	No. of Periods Allotted		
		VIII	IX	X
1.	Language I	4	4	4
2.	Language II	4	4	4
3.	Language III	4	4	4
4.	Mathematics	8	8	8
5.	Science	8	8	8
6.	Social Science	8 (7+1)	8(7+1)	8(7+1)
7.	Work Experience	2	2	2
8.	Health, Sports and Physical Education	3	3	3
9.	Art Education	2	2	2
10.	JRC/NCC/Scouting and Guiding, etc.	2	2	2
	Total	48	48	48

The above Scheme is entailed with the following guide line:

❖ *The head of the institute shall be free to alter one or two periods for different subjects according to need.*

❖ *The duration of each instructional period shall not be less than 35 minutes.*

IV. Curriculum for Standards XI and XII

The introductory passage of this document mentions that the curriculum was *revised and provisionally introduced in June 1994*, like that of Secondary Education. It is expected in this document that the students of general stream should offer two languages as compulsory subjects. Hence the subjects are divided in two groups under languages and other subjects. The subjects in 'B' group are optional subjects. The following list of subjects furnishes the details.

1. Compulsory Language:

Group A: English (Language Level A) or
English (Language Level B)

Group B: Modern Indian Language
As language at Level A or Language at Level B

❖ Marathi
❖ Konkani
❖ Hindi
❖ Urdu
❖ Kannada
❖ Gujarati
❖ Tamil
❖ Telugu
❖ Malayalam
❖ Punjabi
❖ Bengali
❖ Sindhi

OR

Group B: Modern Foreign Language as language at Level A or
Language at level B
1. French
2. Portuguese
3. German
4. Russian

OR

Group B: A Classical Language
As language at Level A or Language at Level B
1. Sanskrit
2. Prakrit
3. Pali
4. Arabic
5. Persian
6. Latin

2. Optional Subjects:

❖ A Modern Indian Language
❖ A Modern Foreign Language
❖ A Classical Language
❖ History

- ❖ Geography
- ❖ Political science
- ❖ Sociology
- ❖ Philosophy
- ❖ Logic
- ❖ Psychology
- ❖ Economics
- ❖ Book-keeping and Accountancy
- ❖ Organisation of Commerce
- ❖ Co-operation
- ❖ Banking
- ❖ Secretarial Practice
- ❖ Mathematics (Commerce)
- ❖ Mathematics(Arts and Science)
- ❖ Physics
- ❖ Chemistry
- ❖ Biology
- ❖ Geology
- ❖ Theatre Art
- ❖ Classical Bharatnatyam Dance
- ❖ Kathak
- ❖ Hindustani Classical Music-Tabla
- ❖ Hindustani Classical Music-Vocal
- ❖ Hindustani Classical Music-Sitar
- ❖ Workshop Technology and Engineering Drawing
- ❖ Elements of Mechanical Engineering and Engineering Drawing
- ❖ Elements of Electrical Engineering and Engineering Drawing
- ❖ Elements of Civil Engineering and Engineering Drawing
- ❖ Auto Electrical
- ❖ Stenography
- ❖ Library Science
- ❖ Western Music
- ❖ General Insurance

Other subjects approved from time to time by the Board.

The above list indicates a large variety of subjects including both Indian and Foreign Languages. Besides these subjects to be offered by the students for Board's assessment, there are subjects in the list that are meant for school-based assessment. These subjects are:

3. School Assessment Subjects:

I. Computer Awareness

II. Health, Sports, and Physical Education

III. Any one of the following:

❖ (NCC) Youth Red Cross

❖ National Service Scheme (NSS)

❖ National Cadet Corps.

The document also furnishes the details of the scheme of examination for internal assessment and the Board Examination. The subjects for internal assessment are to be assessed by the school based on the student's performance over the year. The marks obtained by the students out of 100 are converted into grades. The numerical range of grades is similar to that used for the SSC Examination.

The subjects examined by the Board fall into two categories. In one category are subjects having no practical while the other category has those subjects having practical. Each one of the subjects without practical is examined for 100 marks and those with practical are examined for 70 marks for theory and 30 marks for practical. The following subjects have a slight variation in their examination.

1. *Theatre Arts* is examined for theory of 20 marks and practical of 80 marks.

2. *Western Music* is examined for practical of 100 marks.

The subjects assessed for 100 or 80 marks are given three hours duration and the subjects with practical are given three hours each for practical and theory. There is a provision for tutorials in each subject besides the internal tests and assignments being conducted at the level of school. The following table indicates details of allotment of periods as per the norms set in the Article 7 of the Board's directives. It is also imperative that total Instructional Days should be 195 and total Working Days should be 220

Table 6.6: Allotment of Periods for standard XI and XII
(Total Instructional Days 195 and Total Working Days 220)

S. No.	Faculty	Compulsory Subjects (two)				Optional Subjects (4)
		English		A Modern Indian Language Or A Modern Foreign Language Or A Classical Language		
		Lecture	Tutorials	Lecture	Tutorial	
1.	Arts and Commerce	5	1	4	1	6 x 4=24
2.	Science	5	1	4	1	8 x 4=32

School Assessment Subjects

Faculty	Computer Awareness	Health Sports and Physical Education	Any One Subject Group III	Total Periods
Arts and Commerce	3	2	2	42
Science.	3	2	2	50

It is explained that the allotment of periods in the above table is *suggestive*. The document states further that the prevailing workload shall be in force until a change to that effect is announced.

In conclusion it can be said that:

❖ The framework of the curriculum and evaluation follows the imperatives stipulated in the National Policy of Education '86 and Progranmme of Action '92.

❖ The curriculum documents developed since 1979 for different stages of education are corresponding to the programmes and interventions planned by NCERT from time to time.

❖ The introduction of Primary Education Curriculum was a scientific experiment conducted under UNICEF Project (PCER-II).

❖ A variety of instructional materials including textbooks, workbooks, and teachers' handbooks are developed by the state.

❖ Revision and exercise of updating these materials are constantly done at the State Institute of Education.

❖ NCERT textbooks are adopted by Goa Board of Secondary and Higher Secondary Education, except in the language subjects from Class VIII to XII.

V. Curriculum for Vocational Education

The Board of Secondary and Higher Secondary Education have introduced various vocational subjects. Each course has two compulsory subjects for study. They are:

1. Communication Skills (English) and
2. Foundation Course

There is a provision of theory and practical in both these subjects each with 70 and 30 marks respectively. Each of these subjects is allotted 5 periods in a week.

The Foundation Course is to be selected as per the requirement of the particular vocational course. Besides the two subjects, the students need to study specific subjects pertaining to the Vocational Course of their choice. Each subject is divided into the components of theory and practical.

The following table presents details of the courses to be offered in the vocational stream with assessment scheme.

Table 6.7: The Course in Vocational Stream (XI and XII) with Subjects of Study, Period Allotment Per Week and Scheme of Assessment

S. No.	Name of the Course with Subjects of Study Other *than English and Foundation Courses*
1.	**CATERING AND RESTAURANT MANAGEMENT**
	1. Food Production
	2. Food and Beverage
	3. Costing
2.	**COMMERCIAL GARMENT DESIGNING AND MAKING**
	Std. XI
	1. Fiber and Fabric
	2. Apparel Design and Decorating
	3. Clothing Construction
	Std. XII
	1. Commercial Clothing
	2. Advanced Apparel Designing and Decoration
	3. Marketing and Unit Management

3.	**OFFICE SECRETARYSHIP AND PRACTICE** **Std. XI** 1. Office Procedure and Practice- I 2. Elements of Accounting 3. Typewriting -I **Std. XII** 1. Office Procedure and Practice 2. Typewriting - II 3. Introduction to Computer Application
4.	**ACCOUNTANCY AND AUDITING** **Std. XI** 1. Financial Accounting 2. Business Communication and Statistics 3. Computer Application in Business **Std. XII** 1. Financial Accounting 2. Elements Cost Accounting 3. Auditing
5.	**MARKETING AND SALESMANSHIP** **Std. XI** 1. Elements Marketing 2. Elements of Salesmanship 3. Computer Fundamentals **Std. XII** 1. Retailing 2. Business Communication and Advertising 3. Computer Application in Selling
6.	**INSURANCE** **Std. XI** 1. Life Insurance 2. General Insurance 3. Computer and A/C Accountancy **Std. XII** 1. Life Insurance 2. General Insurance 3. Computer and A/C Accountancy
7.	**INDUSTRIAL MANAGEMENT** **Std. XI** 1. Industrial Administration 2. Basic Accounting and Finance 3. Data Processing in Industry **Std. XII** 1. Industrial Laws 2. Marketing 3. Data Processing in Industry

8.	**AUTOMOBILE ENGINEERING TECHNOLOGY**
	1. Engineering Physics
	2. Mechanical Technology
	3. Auto Engineering
	4. Engineering Mathematics
	5. Engineering Drawing
9.	**COMPUTER TECHNIQUES**
	1. Mathematics
	2. Computer: Fundamentals and Operating System
	3. Computer Software Language
	4. Computer Software Package
10.	**MAINTENANCE AND REPAIRS OF ELECTRICAL AND ELECTRONIC APPLIANCES**
	1. Physics
	2. Mathematics
	3. Basic Electrical Engineering
	4. Basic Electronics
	5. Workshop Practices and Electronic Drawing
11.	**ELECTRONICS TECHNOLOGY**
	1. Physics
	2. Mathematics
	3. Basic Electrical Engineering
	4. Basic Electronics
	5. Workshop Practices and Electronic Drawing

1. **The marking and assessment scheme for the above subjects covers the areas of theory and practical each for 100 marks while the subjects like-**

❖ **Marketing and Salesmanship and**
❖ **Insurance**

   have a provision of <u>training or on-the-hand training carrying 100 marks</u>.

2. **The subject Automobile and Engineering Technology has a provision of session wise marks in its individual papers. Each of these subjects is allotted 5 to 7 periods for practical work and theory respectively.**

Table 6.7 indicates that:

❖ There is a large choice of subject areas in vocational course provided in the vocational curricula developed by the Board.
❖ The curricula have been revised in 1999-2000.

❖ All the courses provided in the curricula are competency based.

❖ Attempt is made in these curricula to provide industrial or on-the-job training and weightage is given to this training.

To sum-up the broad features of the Curriculum of Vocational Course, it can be said that:-

❖ There is a positive effort to relate the course with world of work.

❖ Acquaintance of the learners is developed with the field of work.

❖ The importance of computer and its application to the practical aspects of work are given due place in the curriculum.

❖ The courses provided in the curricula are related to the world of work and are useful to the students for entering into an occupation.

It is generally observed that majority of students passing standerd XII (Vocational) do not enter the world of work but turn to general stream at college level. The educationists observed that efforts are to be made to establish a link between school and industry to provide them access to the world of work. They also opine that the authorities should carry out assessment of manpower requirement.

It could be said in the nutshell that the state has developed its own curricula and instructional materials. At the same time, it has adopted NCERT Framework keeping in tune with the attempts at introducing uniform curriculum to eliminate (or at least to reduce) regional disparities in terms of content and process of curriculum

The evaluation system is also followed as implied in the framework NPE '86 and POA '92. Hence a process of continuous comprehensive evaluation, competency based evaluation and provision of remedial teaching find place in the curriculum document.

The documents include the common core content, identified at the national level and pledged by the principles of child centred and activity based process of teaching and learning with the objective of developing minimum levels of learning among the learners.

The task of framing curriculum at all stages of education in the state is done following the guidelines and principles fixed by

the NPE '86 and POA '92. The state has always responded positively to the interventions of MHRD and NCERT in its efforts at upliftment of quality of education through such interventions.

The textbooks of elementary stage are produced with the help of external agencies by entering into the contract, while the primary textbooks are usually printed and supplied by the Maharashtra Textbook Bureau, Pune, and are, therefore, less costly. The textbooks for Classes V to VII are printed by private publishers and are made available through the local dealers. The responsibility of distribution of textbooks is taken in last two years by Goa Handicraft Corporation. Efforts are put in to make the books available in time.

As far as the curriculum load is concerned, care is taken to lay stress on competency development and the information quantum is kept within reasonable limits. Besides, the size and shape of the books are handy. The books of lower standards are particularly light. The State Institute of Education makes constant efforts to update the textbook material. Teachers and teacher educators are involved in this task. The language textbooks for Classes VIII to XII are also produced by the private publishers and are usually under revision by the Boards of Studies. In case of other subjects, NCERT textbooks are used in the state.

English is a compulsory subject for Classes XI and XII as one of the two languages to be studied by the students. Textbooks from Maharashtra Textbook Bureau are used at this stage. At present, the state does not have its own machinery to print and supply textbooks.

Quality of Education
Teachers and Teaching Process

In 1961 the state began with just a total number of 1768 teachers at primary and secondary levels of education which has reached to a total of 11,345 teachers in 2001 at all levels of school education functioning in as many as 2162 institutions including schools from Primary to Higher Secondary Schools. Besides these teachers at least 1435 are working in Pre-primary Schools. 1046 Anganwadi teachers along with equal number of helpers are in the Anganwadi centres. The growth in the number of teachers indicates that the state has extensively achieved in the field of education. Only very few teachers are yet to be trained. The following data shows the total number of teachers at each level since 1961 and the percentage of untrained teachers.

Table 7.1: Total Number of Teachers in the State at School Level

Year	Total No. of Teachers					Total
	Pre-pry.	Primary	Middle	Secondary	Higher Secondary	
1961	—	679	—	1089	—	1768
1971	—	1878	1080	2455	—	5413
1981	—	2823	1156	5468	142	8664
1991	—	4078	2307	3632	746	10, 763
2001	—	4067	2368	3594	1316	11, 345

Table 7.2: Percentage of Trained Teachers to the Total Number of Teachers

Year	Pre-pry.	Primary	Middle	Secondary	Higher Secondary
1971	-	58.14	2.59	56.65	—
1981	-	93.02	90.65	61.90	76.76
1991	-	89.33	92.02	90.52	62.46
2001	-	93.87	97.93	98.72	83.66

The table shows that:

❖ In the beginning there were a considerable number of untrained teachers.

❖ The percentage of the trained teachers in the state is above 60 per cent from 1981 onwards

❖ The percentage of the trained teachers is constantly increasing.

❖ The training of Higher Secondary School teachers is matter of immediate concern as only 83.66 per cent teachers are trained. This may be due to inadequate training facilities.

Regarding the training of Anganwadi workers and preprimary teachers no data is available. There are teachers, who have acquired D. Ed. qualification, working in many pre-primary schools but their Diploma is not in the particular area of teaching children below the age of four. As per given data, the state does not face shortage in the number of teachers though cases may occur in government schools where posting teachers is required to be done. It could also be clear from the following chapter that many opportunities are offered to the teachers for in-service orientation through the programmes organised by SIE, DIET, and Extension Service Departments. The nature of courses conducted by SIE and DIET is interactive and efforts are always made to organise the courses based on the teachers' needs.

The course themes are as per the NPE '86 and POA '92. Besides, guidelines of NCERT from time to time are also kept in mind. Among the resource persons are academicians, teacher-educators and senior teachers. Expertise of RIE and NCERT faculty is also invited to impart training to key resource persons. Care is also taken to design courses with focus on content, concepts, material development etc. All out efforts are made to re-orient the teachers' approaches to teaching-learning processes. It is observed that there is a gap between content and experiences of children and the teaching-learning processes used by the teachers do not do justice to the learning needs of the children. It is also felt necessary for teachers to adopt such strategies, which identify and encourage talent of the pupils.

The teaching-learning process as suggested in the curriculum is based on the guidelines as per NCERT Framework. Clear guidelines are provided in the Teachers' Handbook as to which approach would be useful to teach the subject units. The

curriculum documents also have made specific mention of the classroom procedures to be adopted by the teachers.

The **'Curriculum of Primary Education** 'states that:

While preparing the curriculum the following basic principles were borne in the mind. Primary education should be minimum and uniform to all. The process of education must be enjoyable. Therefore, it must be child centred and practical.

The statement further points out that:

Imparting education does not mean throwing information to the children. In education, learning is more important than teaching.

It also emphasises the need of *encouraging students to gather knowledge by giving opportunities to participate in various activities.* The statement concludes with very important guideline to the teachers which reads as **through activities learning becomes easier.** This is, in fact, very necessary because the curriculum is competency based. In other words, the teachers are desired to ensure that the learners attain competencies up to the Minimum Level of Learning.

The document also stresses that educational process should be related to the life experiences of the children. It is remarkable here that the orientation courses organised by DIET are designed, considering all these points and course activities are so arranged as to give scope to the teacher participants for their involvement.

Using the OB material in the teaching would be considered as an essential part of activity-based teaching. DIET imparts training to all the teachers in the state for using the OB material in the classrooms. Training sessions included demonstrations of using the OB material in real classroom situation. The teachers and the inspectors were exposed to the multiple use of OB material and were convinced how the use of material did not only make learning enjoyable but also catered to the development of certain competencies in the learners. 42 ADEIs and 3114 primary teachers were covered under these courses, conducted at local centres in the state.

Still the situation has not improved much though these components are included in the training programmes of DIET and SOPT programmes conducted by SIE since 1993.

Some of the reasons for this situation are:

- ❖ There is lack of sufficient follow up work and no on the job training is imparted to the teachers.
- ❖ The teachers may find it difficult to relate content with the suitable materials.
- ❖ They may be finding it difficult to plan useful activities inviting participation of the learners.

In normal practice, majority of teachers resort to teaching content from the textbooks. This leads to leave in the children basic weaknesses related to acquisition of language and mathematical skills. One of the educationists, responding to the question related to the classroom process felt that training only in using OB material is not enough. He suggested that some incentive could be given to the teachers who use OB material while teaching. It was also suggested that the inspecting authorities should ensure that the OB materials are actually used in teaching-learning processes. Teachers, in this context, point out that some OB material like Mini tool Kit is not brought in use as they lack in the skill of using it

The efforts of DIET and SIE have, however, borne fruit in some other teaching skills such as making teaching participatory. Children are invited to take part in some of the other activities while learning.

Innovations like making school child-friendly with a variety of materials written and displayed on walls, providing space on the lower part of the walls for children to write in the classroom, making low cost teaching material prepared by the teacher, introducing student participation in school assembly, having poetry recitation sessions at the end of school time, encouraging library reading, organising field visits are brought into practice in many of the primary schools.

With these positive developments; it has to be acknowledged that the students entering Class V face a number of difficulties. Many of these difficulties arise due to the change in medium of instruction at this stage. The students having their primary education in vernacular and just two years of learning English from Class III, are exposed to a tough situation when they begin learning in English medium.

There are certain factors involved in this situation, namely:

❖ Poor awareness of the primary curriculum and content in the Middle School Teachers.

❖ Language weakness, particularly in case of English as the medium of instruction, for children who have learnt English only from Class III for two years prior to the time of introduction of English as medium of instruction in Class V.

In the year 1998-99 DIET had taken up a study to understand problems faced by the students due to the shift of medium of instruction from Marathi/vernacular to English in Class V. The analysis of the feedback received from the students through their response to a test administered to them, revealed that only 8.45 per cent students had acquired the ability to understand only factual information presented to them in English. As a strategy to cope with the above problem the institute has been organising bridge courses for the teachers of standerd V.

The institute has identified the above said factors as training need for its Bridge Courses in various subjects taught in Class V. The institution has conducted several programmes for the teachers who teach English to Class III and IV. Each of these courses is of 5 to 10 days duration and focus of the course is to address difficulties faced by the teachers and students in teaching and learning English at the Primary Stage.

The Curriculum of standerd V to VII also recognises very appropriately that:

The present practice of teaching only the textbook does not encourage self-learning by students. As a result education becomes monotonous, boring and meaningless.

The document stresses, therefore, that:

So it is essential to provide the students learning experiences through different educational creative activities rather than to rely only on rigid instructions.

The state has also made Teachers' Guides available in all school subjects providing detailed guidelines to the teachers for teaching each individual unit. The teachers' guides also offer detailed analysis of content pointing out the areas to be emphasised while

teaching. Teacher's Guide also suggests teaching-learning materials for the use of teachers.

The curriculum of standerd VIII to XII also emphasises a need to make teaching- learning process activity-based and participatory. In this context, it is remarkable that the teachers of various subjects ask students to take up assignments and weightage to this work is recorded in their progress cards. But the classroom procedures usually followed by the teachers are textbook oriented, as the examinations are content-based. Teachers are asked to adopt teaching strategies as per the curriculum guidelines and guidance provided to them in the orientation courses. Their heads supervise the classroom strategies adopted by the teachers and their observations are recorded in the logbooks. It is imperative for teachers to prepare annual plan of their teaching and maintain teaching diary or teaching notes for effective monitoring. At the level of Directorate of Education, inspections are conducted by different officers at different levels of school education. The following chart shows the allocation.

Table 7.3 Allocation of the Department's Authorities for School Inspection

S. No.	Level of School Education	Inspecting Authority	Nature of Inspection
1.	Primary	ADEIs	Academic and Administrative
2.	Middle	Deputy Education Officers and ADEIs	Academic and Administrative
3.	High School including	Asstt. Director of Education of Zone with Dy. Education Officer	Academic and Administrative
	Middle School Section	Dy. Director of Education and Director of SIE with faculty panel	
4.	Higher Secondary School	A panel including Board authority and Dy. Director of Education	Administrative and Academic

There is an internal co-ordination in fixing schedule of inspections of educational institutions. The ADEIs pay scheduled visits to primary schools to ensure smooth running of the schools. The inspecting authorities are expected to provide constructive guidance to the head and teachers in the schools under inspection. This guidance can be pertaining to administration, supervision,

teaching-learning activities of the school. It is also expected that following the Inspection report the school should submit a compliance report based on observations.

The state has adopted the evaluation process as per the National Policy of Education (NPE '86) and POA '92. Efforts are also made to reorient the evaluation practices and develop suitable evaluation tools as per the local needs. The basic framework of evaluation is kept unchanged despite the efforts at making it need based. Introduction in grading in some subjects is also done as per the NCERT guidelines. The details are stipulated in the following pages, citing information of evaluation practices at every stage of school Education. The Primary Education Curriculum document elaborates on the concept of evaluation practices to be followed for assessment of students in Class I to IV.

It states that:

"Mere achieving of information and learning it by heart or memorising it, is not education..."

It stresses that developing competences to gather knowledge is the need of the day. A broader perspective is offered to this point in the statement of one of the objectives of Primary Education as:

"Some students (are likely) to leave school after IV class of primary stage. Primary education should (therefore) aim at enabling such students to proceed with their education informally; that is, enabling them to enrich their knowledge..."

In this context the document explains:

"Competencies include not only the achievement of the set objectives but also the expected changes in the behavioural pattern."

Hence the document states in the guidelines clearly:

"When the curriculum is competency oriented, the evaluation should be done accordingly. The success or failure to achieve the set objectives will show whether we have been able to create competency or not..."

The last part of the statement emphasises a very important aspect of evaluation practices as the success or failure of the students would reflect on the ability to develop competency. The curriculum has a set of competencies within the parameters of each of the

subject. One competency is based on the other. The document cites the guidelines of National Curriculum. Some of the guidelines formulate the basis for the evaluation processes practiced in the state. It says: evaluation is:

"...a constant search to see how far the intellectual, physical and emotional development of the pupils has taken place".

This stands for the concept of continuous comprehensive evaluation. To comply with the requirement, a pattern of tests and examinations is evolved as follows.

Table 7.4: Periodical Tests/Examinations

Tests/Exam.	Standard			
	Std. I	Std. II	Std. III	Std. IV
1st test (25 marks)	October	August 4th week	August 4th week	July 3rd Week
2nd test (25 marks)	December. 3rd week	October	October	August 4th week
First Terminal Exam 50marks	—	—	—	October
3rd test (25 marks)	February. 2nd week	Feb. 2nd week	Feb. 2nd week	Dec. 2nd week
4th test (25 marks)	April 2nd week	April 2nd week	April 2nd week	Feb. 2nd week
Second Terminal Exam. (50 marks)	—	—	—	April

From the above table the following points become clear in the light of continuous comprehensive evaluation:

❖ There are four tests each for all Classes (I to IV) at primary stage.

❖ Besides the four tests, the students of standered IV have to answer two examinations at the end of each term.

❖ The first test of standered I falls in October that is **at least four months** after the opening of school year in June. In other words, the first periodical test of standered I students is held at the end of the first term.

This does not match with the process of continuous evaluation, as the competencies of the children will be tested after a long gap

as the children would show their attainment of the competencies only at the time of examination. The competencies developed in the beginning of the school year are likely to have weakened incase of majority of the students. This is more likely as the age of the students at the time of entry in the school is just 4 years and 9 months. (Up to 1999-2000 it was 4 years and 9 months. Increasing the age of entry to the first standard is under consideration of the State Government).

It is also noticeable that during 8 weeks' programme (June to 15th Aug.) many basic competencies are expected to be developed among the learners, and are also required to be tested. In this view the first test has a long interval as far as the competencies developed in the early phase of the year are concerned.

The standered IV students face two examinations at the end of each term carrying 50 marks in each subject. There is also a provision for both oral and written test while grading system is used for assessment of non-scholastic subjects. This grading system is of 5 to 7 grades. The document states that:

> *As the teachers are not used to grade system, we have adopted a mixed system in our new curriculum, where marks are allotted and based on these marks corresponding grades are given.*

Interestingly, the grade pattern of the Middle School Level and that of the Secondary Level is different from each other. The grades are determined based on the marks as shown below:

Marks	Grades
81 to 100	A
60 to 80	B
50 to 60	C
25 to 49	D
Below 25	E

The following statements justify the above arrangement of grading. They read as:

> *The student's progress shown by each of these grades, indicate the long-term range of marks scored by them. Hence grade system will make the comparison of progress made by the students of different schools more realistic and clear.*

Further the document cites examples to support this point. The arrangement of grading still needs some improvement particularly in the range of marks.

The ranges of marks for B and C grades show 60 marks as attainment points. Range for D grade ends at 49 marks while range of A grade begins with 81 marks. It has to be very much clear as to which marks range stands for a particular grade.

The system of marks and grade is followed for the following subjects:

- ❖ Language (Mother Tongue and Medium of Instruction): Marathi/Konkani/English/Urdu
- ❖ Mathematics
- ❖ Environmental Studies and
- ❖ Second Language (for standered III and IV): English for the Students having their mother tongue and medium of instruction Marathi/Konkani/Urdu and Marathi/Konkani for the students having English as Medium of Instruction.

The other set of subjects including Healthy Life, Craft, and Recreation i.e. (Art Education) are assessed with grades as **F for Fair, G for Good and E for Excellent.**

The document states further, that it is important to keep the parents informed about the progress of their children. At the end of the each term, such a progress card should be sent. From this it also becomes clear that percentage in case of the standered IV children is available by the total number of marks obtained by the children in all the four tests, terminal and annual examination. In case of the students of standered I to III the percentage need to be worked out by getting the double of the total marks scored by them because the total marks obtained by the students are out of 50. The percentage is used to decide the grade of each student.

The curriculum framers felt that the parents may not follow the progress in terms of grades and therefore the grades should be converted into the categories like:

- ❖ Excellent
- ❖ Good
- ❖ Fair

❖ Unsatisfactory

❖ Poor

Here is the form of the Student's progress card:

STUDENT'S PROGRESS CARD
(FOR PARENTS)

Name of the School : _____
School Year : _____
Name of the Student : _____
_____ Group _____ - Roll No. _____

REMARKS ABOUT PROGRESS

Subject	First term	Second term
First Language		
Mathematics		
Environmental Studies		
Second Language		

REMARKS ABOUT PARTICIPATION:
Excellent, Good or Fair

Healthy Life	
Recreation	
Craft	
Days present	
Total Working Days	
Teacher's special remarks if any	
Class Teacher's Signature with date	
Parent's Signature with Date	

The Upper Primary Curriculum (for standard V to VII) cites class-wise list of competencies to be attained at Minimum Level of Learning in the syllabus of each subject. It also provides guidelines for evaluation of each subject, stating that *evaluation is an integrated part of teaching-learning processes*. It is expected to formulate remedial activities based on the feedback through evaluation. It is further stated in the curriculum that it provides guidelines for continuous comprehensive evaluation.

The state has adopted *No Detention Policy* up to standered III. According to National Policy of Education, it is decided to give automatic promotion to all the children who have necessary minimum attendance in the class, irrespective of his/her progress in studies. It is felt necessary that students getting automatic promotion should make up backlog in studies as they keep on learning in the next standard. Provision for individual guidance periods is made in order to facilitate revision and remedial work with such children to help them to come on par with other students in the class. The curriculum document desires to hold're-examination' of such students to test their attainments.

The document also stipulates rules of promotion as given below:

RULES OF PROMOTION

1. To be promoted from one standard to higher standard a student will have to have a minimum attendance of 50 per cent. Besides, appearance in minimum two tests in each subject is necessary.
2. A student who has passed in all the tests may be promoted to the higher class even if attendance is less than 50 per cent.
3. To be promoted from Class IV to V the following sub-rules will have to be followed in addition to the foregoing two rules.
   a) It is necessary to pass in all the four tests of Class III with 50 per cent marks.
   b) It is necessary to score 35 per cent marks from the aggregate of 100 marks of the two terminal examinations. Students can be exempted from the two tests and one terminal examination in case they produce a medical certificate. In such a case he/she should score at least 35 per cent marks, taking into consideration the total marks he/she has scored in the tests and terminals he has answered.

Attempts are thus made to provide universal education to all the children in the state and to ensure that each one of them is enrolled and retained in the school system until he/she passes Class IV and develops minimum levels of competencies. A scientific study, however, into the impact of '*No Detention Policy*' is necessary to be made.

Relating remedial programme with quality education the curriculum (V to VII) recognises that alertness and efficiency in learning varies from child to child. Remedial teaching for such children is found to be necessary to bring them to the required level of learning. Details as to weightage of marks and periodicity of tests and examinations to be conducted at middle school level are not provided in the document. Neither does the document make it clear how the process of continuous comprehensive evaluation will be followed.

The Goa Board of Secondary and Higher Secondary Education has provided a scheme of assessment in each subject but does not clearly state how continuity in evaluation practice will be maintained. The scheme of assessment from Class VIII to XII is given in the 6th Chapter of this report.

Marking Scheme

The Goa Board of Secondary and Higher Secondary Education set up in 1975 have performed its role significantly contributing to the progress of education the state. Its emergence coincided

with a major change that took place in the history of education. It was in this year when the first batch of SSC students (standered X) entered the +2 stage for Higher Secondary Education. Until 1975 the state followed syllabus and examination system of SSC Board of Maharashtra (Pune). Thus the emergence of Goa Board at this time left it with a pivotal role to perform in the field of education.

The Board has introduced reforms in examination system for bringing utmost objectivity into it over the recent years. Some of these reforms are:

❖ Appointment of observers and vigilance squad to prevent malpractices during examinations.
❖ Allotting codes to the students' answer books of the HSC Examination to keep their identity confidential.
❖ Computerisation of question papers and proof reading and cross checking to settle discrepancies against actual answer books.
❖ Computerisation of results.
❖ Improvement Scheme for Class XII.
❖ Discontinuation of Merit list at SSC and HSC examinations.

The Goa Board of Secondary and Higher Secondary Education have proposed for the following reforms:

❖ Showing photocopies of answer books to the candidate.
❖ Introduction of supplementary examination for HSC students. The examination will be held in June/July for the students who have failed in one subject. This would enable them to seek admission to higher classes and would save a year of their career.
❖ The students will not be declared as 'failed'. Instead the result will be declared with a remark **'Needs Improvement'**
❖ Introduction of recurring Vocational Practical Examinations for continuous comprehensive evaluation.

The efforts of the Board indicate that the examination system will be objective and transparent. Besides, the principle of continuous comprehensive evaluation is also to be followed.

In spite of all attainments it would be a great task ahead to identify new measures and to implement them to enhance the quality of education in the State.

Academic and Administrative Support System

Academic Support System

The state has devised systems for academic and administrative support system for educational activities. The state has its major agencies functioning in the academic field. These agencies are, the State Institute of Education (SIE), District Institute of Education and Training (DIET) and Goa Board of Secondary and Higher Secondary Education. These institutions perform their role in the school education in various ways such as:

❖ Curriculum Development

❖ Development and Review of Instructional Materials

❖ Evaluation

❖ Teacher Education and Training

❖ Activities related to student development

❖ Conduct of examinations for Talent Search in the State.

These activities are generally aimed at uplifting the quality of education in the state. These institutions have been very useful in gathering first-hand feedback of the ground level realities in the schools, conducting inspections and field visits. A detailed description of activities of these institutions in terms of academic support is cited in this chapter.

Raising teacher competencies to an effective level has been a matter of concern, in the light of the NPE'86 and POA'92. The programmes involved training in content and processes of

curriculum, organisation of curricular activities within and outside schools, adopting creative and innovative teaching-learning approaches and class room processes, taking up action research to find solutions to academic problems etc. These programmes also covered training areas like analysis and planning of content, evaluation processes, and orientation on policy perspectives, institutional planning, development of teaching-learning materials and various others. Besides the said training programmes organised at the state level, the teachers are given opportunities to participate in the training programmes and orientation workshops conducted by the Regional Institute of Education, NCERT, and NIEPA. These teachers are trained as key resource persons whose services are also utilised in training programmes.

The teachers are involved in interactive processes and are put to self-learning activities during the training programmes. The teacher training programmes are organised by the following agencies in the state:

- ❖ The State Institute of Education (SIE)
- ❖ District Institute of Education and Training (DIET)

The extension service departments of the colleges of education in the state also organise teacher education programmes. The state has a good network of School Complex Scheme which organises teacher training programmes for local teacher community. Courses organised in this way, are more need based and address to the immediate local academic problems related to learning of different subjects at different stages. Taluka Level School Complex Committees organise such training programmes on a larger scale.

Opportunities to attend training programmes of various kinds organised by the institutions like NCERT, NIEPA, RIE-Bhopal, CIEFL-Hyderabad, CCERT, and other such national institutions, are made available to the teachers to enhance their competencies. The following table shows the areas of teacher training organised by SIE with the type of teacher participants:

Table 8.1: Year-wise Break-up of Teacher Participation in Teacher Training Programmes of SIE since 1993-94.

Year	No. of teacher Participants					Others including Tr. Educators, heads of Institutions Inspectors	Total
	Pre-pry AWWs	Primary	Middle	Sec.	Hr.Sec.		
1993-94	—	—	202	31	—	150	383
1994-95	1041	786	721			40	2588
1995-96	160	1800	506	574	117	—	3157
1996-97	7	—	1655	493	24		2179
1997-98	40	—	797	161	—	65	1063
1998-99	100	918	333	152	18	—	1521
1999-2000	-	453	39	87	—	—	579
2000-01	60	159	57	433	—	112	821
Total	**1408**	**4116**	**4310**	**1931**	**159**	**367**	**12291**

Awws = Anganwadi workers

Table: 8.2: Year-wise number of courses conducted by State Institute of Education since 1993

Year	No. of coursers	Average no. of participants
1993-94	10	38.30
1994-95	68	38.05
1995-96	93	33.99
1996-97	110	19.79
1997-98	44	23.25
1998-99	45	33.8
1999-2000	13	44.53
2000-01	30	27.36
Total	413	29.64

The table shows that:

* ❖ The SIE has conducted 413 courses in the period of 9 years and covered 12,244 teachers of various stages of school education.

* ❖ The average participation of teachers in these courses was 29.64. In other words 30 teachers each attended these courses.

* ❖ Major beneficiaries of these courses are Middle School Teachers followed by the primary teachers in the state. This means that most of the teacher education programmes of SIE were meant for Primary and Middle School teachers.

* ❖ The number of Secondary School teachers is less as compared to the number of Primary and Middle School teachers but still it is considerable.

* ❖ The state runs ECE programmes under UNICEF scheme. It has its own Pre-primary Schools in the areas where Anganwadis are not functioning. The State Institute of Education has covered 1361 Anganwadi workers and helpers in its teacher education programmes. It has also a group of master trainers trained by NCERT who impart training to the Anganwadi Workers.

* ❖ The institute appears to have conducted maximum (110) number of courses in the year 1996-97. 35 SOPT courses were conducted covering 1800 primary teachers during this year.

* ❖ In the years 1993-94 and 1999-2000 the institute conducted the lowest number of (10 and 13) courses respectively.

The teacher orientation also takes place through other activities such as competitions, seminars, exhibitions, materials development activities. The above courses are modified for further improvement on the basis of the feed back received at the end of the programmes. The SIE and DIET are mainly involved in the teacher education activities in the State. Besides the training of the teachers, these institutions perform multiple roles in the field of education. The following paragraphs describe the role performed by the State Institution of Education.

The State Institute of Education was established in May, 1976 as an academic wing of the Directorate of Education. It was constituted with the objective of guiding policy formulation of school education and initiating its implementation in the state. The Institute has spent years of its existence as the principal academic agency in the state bearing responsibility towards quality improvement of school education and professional growth of teachers. Among other objectives envisaged in its inception are:

- ❖ Curriculum development,
- ❖ Evolving and dissemination of new techniques of teaching and evaluation,
- ❖ Providing in-service teacher education,
- ❖ Production of teaching-learning materials,
- ❖ Guidance and counseling in education.

Role and Mission of the State Institute of Education (SIE)

The institute, thus, performs a major role of providing academic support for improving the quality of school education at all stages from Pre-primary to Higher Secondary. The State Institute of Education has kept on functioning since its inception with full awareness of its role and mission in the field of education. It has not merely implemented programmes for the benefit of school system in Goa but has been able to arouse general awareness towards the educational problems and activities in the state of Goa .The Institute has also offered its expertise to the policy makers as and when required. While functioning, at times, in collaboration with the national level apex institutions and agencies of education, this Institution has developed and adopted many programmes to put school education on sound footing and to accord a scientific treatment to various aspects of school education. In this context, it is to be appreciated that the Institution's responses to the interventions of external agencies and institutions have remained very prompt and positive. It has seldom shirked from its responsibility of extending and initiating useful schemes, projects, programmes, and activities in the field of education. Innumerable opportunities of opening up to the educational programmes taking place outside the state have been made available to the teachers, teacher educators, administrators, inspectors, and students through this institution. Their exposure and experience have definitely brought enrichment to the field of school education in the state.

Tasks and Functions of SIE

This institute is involved in performing its own tasks of teacher education, development of curricular materials, organising seminars, conducting talent search examinations, arranging for science fairs, exhibitions, competitions of different types both for teachers and students while it is in constant interaction with the apex educational institutions like NCERT, NIEPA, NCTE, and RIE Bhopal. This institution has also sought interventions from Central Institute of English and Foreign Languages (CIEFL) Hyderabad, Kendriya Hindi Sangthan, Allahabad, HM Patel Institute of English, Vallabh Vidyanagar in training and materials development activities.

SIE has made constant attempts to identify training needs and areas in need of academic support which keep it involved in the process of devising and designing training programmes for teachers at all levels of school education, teacher educators, heads of the schools and inspectors. Review and revision of curriculum and curricular materials is another major task of this institute. It has also brought out its educational journal *"Innovations and Researches"*. Its newsletter *Edu-Focus* is also one of its publications.

The following table shows the number of teachers and trainees who have undergone the DIET Training Programmes. The out turn of Diploma in Education (D.Ed) holders in the last decade is 394.

Table 8.3: The Year-wise Number of Beneficiaries of the In-service Training Programmes Conducted by the DIET since 1991

Year	No. of Beneficiaries
1991-92	1160
1992-93	3895
1993-94	1325
1994-95	1093
1995-96	1706
1996-97	926
1997-98	1046
1998-99	842
1999-2000	819
Total	**12812**

The table presents a very positive profile of teacher education in the state. The SIE and DIET have also made efforts to organise training programmes with the help of RIE, Bhopal and NCERT, New Delhi. The State Institute of Education has also received support from NIEPA, New Delhi when it organised a course in Institutional Planning and Management for the heads of High Schools and Higher Secondary Schools.

These Institutions have taken care of making their orientation programmes interactive. Attempts are always made to raise the competencies of teachers through the workshop mode. They are involved in group discussions, material development and presentation, and planning for innovative activities during the courses. The general activities conducted in teacher training programmes of SIE and DIET are:

- ❖ Group Works
- ❖ Group Discussions
- ❖ Presentations of Group Work
- ❖ Demonstrations
- ❖ Tutorials and Practice Sessions

These activities form part of the teacher education programmes besides some lecture-discussion sessions orienting the participants to new or unfamiliar subject areas of the courses.

The DIET has also performed very effectively in the field of teacher education and has produced 394 Diploma holders by 2000. The out turn of its training programmes since 1990 is 12,812 while it has covered through its programmes teachers from Pre-primary to Middle School stages. The programmes conducted by DIET in the year 1997-98 and 98-99 were meant for the heads of school complexes including 194 headmasters of High Schools and principals of Higher Secondary Schools. The DIET has also conducted orientation courses for ADEIs in order to acquaint them with various teacher-training programmes. The objective was to enable them to inspect teaching-learning processes in the classrooms more effectively. The role performed by the DIET in the field of teacher education is equally extensive as that of SIE.

The Extension Service Department of the GVM's College of Education, Ponda has also been active in organising workshops and orientation courses. The department has organised a variety of programmes aimed at content enrichment and concept

building among the participants. This department also offered orientation courses in methodology of teaching, use of instructional materials, etc. since 1994. Coverage of the number of teachers is an indicator of the department's attempt of setting up a constant rapport with the teaching community and responding to their training needs. The duration of programmes organised by this department ranges from half day sessions to 10 days mass level orientation activities.

There are other agencies, which take up teacher education programmes. The extension service departments of the colleges of education functioning in the state are very active in conducting teacher education programmes. The network of school complexes also organises short-term courses (of one day duration) whenever the organisers feel it necessary for the teachers in their jurisdiction. Such programmes address to the immediate problems faced in teaching-learning activities.

SIE and DIET seek collaboration with RIE, Bhopal, NCERT, and NIEPA for conducting in-service courses. The SIE conducted programmes in collaboration with NCERT, NIEPA and RIE, Bhopal and Mysore. It has always sought collaboration with the Kendriya Hindi Sansthan, Hyderabad for organising teacher-training programmes in Hindi. Besides such collaborations, the SIE has worked hand-in-hand with local colleges of Education, Goa University and subject teacher associations.

A statement in the **Study on Educational Administration in Goa: Structures, Processes, and Future Prospects** reads as follows:

In-service teacher training in the state is not organized systematically. It is essential to specifically prepare a programme for enrichment of content and methodology and up-gradation of skills of teachers for teaching...

This study was conducted in 1991 based on the second survey on NIEPA, New Delhi. In the light of the above statement, the data of teacher education in the state shows that the efforts at conducting teacher education programmes are becoming more systematic. Considering the number of teachers in the state, the coverage of teachers in teacher education programmes in the last 10 years is quite impressive and gives an indication that more would be accomplished in the years to come. It is also felt necessary, at this stage, to reconsider principles of programme formulation with more

stress on quality improvement, competency building, performance and accountability and further research in education

Administrative Support System

The state has a well-equipped administrative set-up to look after the education system. As the state is very small, communication and coordination become easy and quick. The policies and programmes are carried out to the optimum level through the close contacts between agencies and institutions. Inter and intra departmental coordination is also remarkable. Besides, the responsive attitude of the administrators has created a positive relation between the administrative and academic machinery functioning in the field of education. The following passages give a brief description of the administrative support in the state.
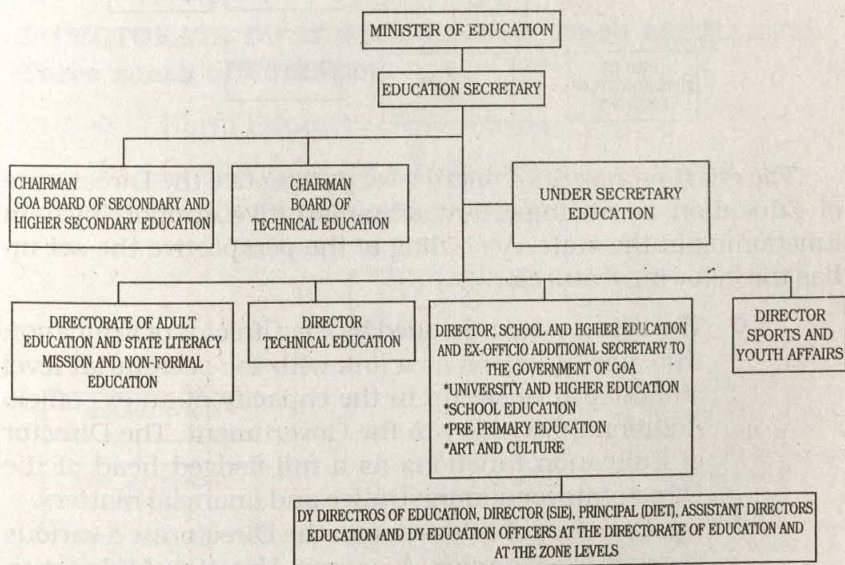
The state has two districts namely North and South Goa each having five and six Talukas respectively. The State Directorate of Education is the main office that administers monitors and processes schemes, programmes and activities for implementation in the state. It also functions as a nodal agency to disseminate various programmes and assignments of the apex national level educational institutions and organisations and functions as a constructive link between these bodies with the local educational organizations. The Directorate of Education also offers financial support to the educational institutions in the state in the form of Grant-in-aid, grants for providing basic infrastructural facilities to the educational institutions working in the field of school education, and financial assistance to the students coming from the weaker sections of the society.

Making infrastructure provisions (in coordination with the State PWD, providing instructional materials including textbooks, AV aids, computers etc. are also some of the responsibilities of the Directorate of Education. Among other functions, the State Directorate of Education is directly involved in appointments, transfers and promotions of teachers at all stages of education and those of the other staff. Matters related to the executive staff of Directorate of Education including the headmasters and principals of Government High Schools and Higher Secondary Schools are dealt with by the secretariat as per the Directorate's proposals.

The educational administrative set up in the state has two levels. The Secretariat Level of administrative set up is the top. The
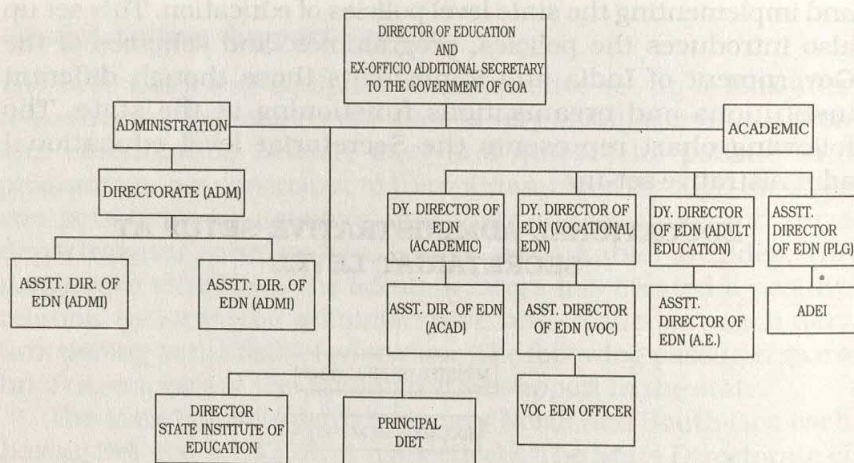
Secretariat level administrative set up in the state is the nodal structure of the support system, which is involved in formulating and implementing the state level policies of education. This set up also introduces the policies, programmes, and schemes of the Government of India and implements those though different institutions and organisations functioning in the state. The following chart represents the Secretariat level educational administrative set-up.

EDUCATIONAL ADMINISTRATIVE SETUP AT SECRETARIAT LEVEL

```
                    ┌─────────────────────┐
                    │ MINISTER OF EDUCATION│
                    └─────────────────────┘
                    ┌─────────────────────┐
                    │ EDUCATION SECRETARY │
                    └─────────────────────┘

┌──────────────────────┐  ┌──────────────┐        ┌──────────────┐
│ CHAIRMAN             │  │ CHAIRMAN     │        │ UNDER SECRETARY│
│ GOA BOARD OF SECONDARY│  │ BOARD OF     │        │ EDUCATION    │
│ AND HIGHER SECONDARY  │  │ TECHNICAL    │        └──────────────┘
│ EDUCATION            │  │ EDUCATION    │
└──────────────────────┘  └──────────────┘

┌──────────────────┐ ┌──────────┐ ┌───────────────────────────┐ ┌──────────┐
│ DIRECTORATE OF   │ │ DIRECTOR │ │ DIRECTOR, SCHOOL AND HGIHER│ │ DIRECTOR │
│ ADULT EDUCATION  │ │ TECHNICAL│ │ EDUCATION AND EX-OFFICIO   │ │ SPORTS AND│
│ AND STATE        │ │ EDUCATION│ │ ADDITIONAL SECRETARY TO    │ │ YOUTH     │
│ LITERACY MISSION │ └──────────┘ │ THE GOVERNMENT OF GOA      │ │ AFFAIRS   │
│ AND NON-FORMAL   │             │ *UNIVERSITY AND HIGHER     │ └──────────┘
│ EDUCATION        │             │  EDUCATION                 │
└──────────────────┘             │ *SCHOOL EDUCATION          │
                                 │ *PRE PRIMARY EDUCATION     │
                                 │ *ART AND CULTURE           │
                                 └───────────────────────────┘

        ┌─────────────────────────────────────────────────────────┐
        │ DY DIRECTROS OF EDUCATION, DIRECTOR (SIE), PRINCIPAL      │
        │ (DIET), ASSISTANT DIRECTORS EDUCATION AND DY EDUCATION   │
        │ OFFICERS AT THE DIRECTORATE OF EDUCATION AND AT THE ZONE │
        │ LEVELS                                                   │
        └─────────────────────────────────────────────────────────┘
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The chart shows that the state has a very simple network of administration headed by the Minister of Education and Education Secretary. The Directorates working in this network have direct access to the top authorities such as the Secretary (Education) and the Minister of Education. The Assistant Directors of education have direct access to the Director of School Education. The following chart presents a clear picture of the administrative structure of the Directorate of School Education in the state.

DIRECTORATE OF SCHOOL EDUCATION I: APEX LEVEL

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                    ┌─────────────────────────────┐
                    │   DIRECTOR OF EDUCATION      │
                    │            AND              │
                    │ EX-OFFICIO ADDITIONAL SECRETARY │
                    │   TO THE GOVERNMENT OF GOA   │
                    └─────────────────────────────┘
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ADMINISTRATION				ACADEMIC

DIRECTORATE (ADM)		DY. DIRECTOR OF EDN (ACADEMIC)	DY. DIRECTOR OF EDN (VOCATIONAL EDN)	DY. DIRECTOR OF EDN (ADULT EDUCATION)	ASSTT. DIRECTOR OF EDN (PLG)
ASSTT. DIR. OF EDN (ADMI)	ASSTT. DIR. OF EDN (ADMI)	ASST. DIR. OF EDN (ACAD)	ASST. DIRECTOR OF EDN (VOC)	ASSTT. DIRECTOR OF EDN (A.E.)	ADEI
	DIRECTOR STATE INSTITUTE OF EDUCATION	PRINCIPAL DIET	VOC EDN OFFICER		

The chart represents a micro level perspective the Directorate of Education as an important administrative support system functioning in the state. According to the perspective the set up has the following features:

❖ The Directorate is headed by the Director of Education who also functions as a link with the secretariat level administrative set up in the capacity of an ex- officio Additional Secretary to the Government. The Director of Education functions as a full-fledged head of the Directorate for administrative and financial matters.

❖ Dy. Directors of Education in the Directorate's various sections like Planning, Academic, Vocational Education and Adult Education assist the Director of Education. Besides these Dy. Directors, two officers of that rank function as the Director of the State Institute of Education (SIE) and Principal of the District Institute of Education and Training. The State Government from amongst the eminent educationists of the state selects the chairman of Goa Board whose rank is equivalent to that of the Dy. Director of Education.

❖ There are Assistant Directors of Education in the Directorate who hold charge of the Directorate's sections as mentioned above.
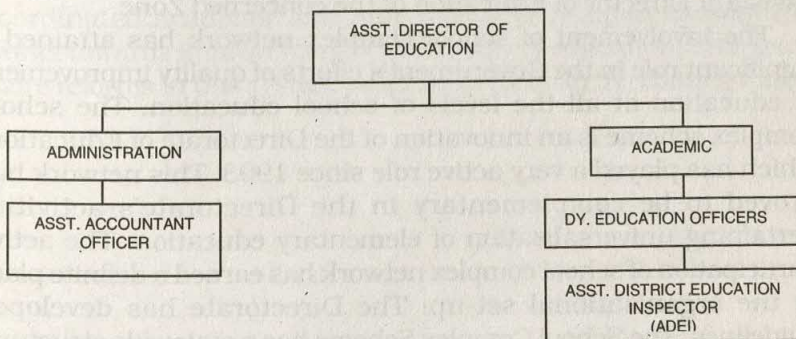
❖ The Directorate of Education has Accounts Section headed by the Joint Director of Accounts. There are Assistant Accounts Officers who assist the Joint Director of Accounts

The Directorate of Education also has other sections like Grant-in-aid section, Audio-visual section, Audit Cell and Statistics and Survey Section. Each of these sections is looked after by the Section Heads. The officers in the rank of the principal of Higher Secondary Schools function as Environmental Education Officer and Vocational Education Officer. Besides the set up described here, the state has decentralised its educational administration as shown in the following chart:

DIRECTORATE OF SCHOOL EDUCATION II: ZONE LEVEL
Three zones of Education

❖ North Education Zone, Mapusa
❖ Central Education Zone, Panaji
❖ South Education Zone, Margao

There are three zones of education under the Directorate of Education, each of which is headed by the Assistant Director of Education. Deputy Education Officers of the rank of the principal of Higher Secondary School assist the Assistant Director of Education of the zone. Each Zonal Office has Accounts Section headed by an Assistant Accounts Officer. The zonal offices are known as North, Central, and South Educational Zone and function at Mapusa, Panaji, and Margaon respectively. The taluka offices function under their respective Zonal Offices. The table gives the allocation.

Table 8.5: Zonal Education Offices with their Location and Jurisdiction of Taluka Offices

No.	Zonal Office	Placed at	Taluka Offices Under the Zone
1.	North Educational Zone	Mapusa	Pedne, Bardez, Bicholim and Sattari
2.	Central Educational Zone	Panaji	Tiswadi, Ponda, Sanguem
3.	South Educational Zone	Margao	Salcete, Kepem, Mormugao, Canacona

Each Taluka Education Office in the state is known as ADEI office and is in the charge of Assistant District Educational Inspectors. One of the ADEIs holds administrative charge and functions as Drawing and Disbursing Officer (DDO) of the office. The ADEIs' major role is to undertake academic inspections of the Pre-primary, Primary, and Middle Schools in their jurisdiction. They are expected to offer academic guidance to the teachers and help them in solving the problems faced in the teaching-learning processes. The ADEIs also function for the upliftment of the quality of education through school complexes and Parent Teacher Associations (PTA). They also discharge administrative duties. They are directly responsible to the Dy. Education Officer and Assistant Director of Education of the concerned Zone.

The involvement of school complex network has attained a significant role in the Government's efforts of quality improvement of education at all the levels of school education. The school complex scheme is an innovation of the Directorate of Education, which has played a very active role since 1993. This network has proved to be complementary in the Directorate's activities pertaining universalisation of elementary education. The active participation of school complex network has earned a definite place in the organisational set-up. The Directorate has developed guidelines. The School Complex Scheme has a statewide structure.

The hierarchical order of various committees at different levels is given in the following description. The State Level School Complex Steering Committee functions at the apex level. There are three committees working at the three educational zones. They are known as Zone Level School Complex Steering Committees. Taluka Level School Complex Steering Committees work at the level of all 11 Talukas. They monitor activities at the school complex level, which is the primary set-up at the micro level. It includes High Schools, Primary Schools, and Middle Schools in its jurisdiction. Super School Complexes are led by the Higher Secondary Schools while

the school complexes are led by the high schools. There are 173 school complexes and 63 super school complexes (as in the year 2000). It is imperative for all institutions to become members of the school complexes and to take part in the activities organised by them. The State Government has made provision for grants for the activities of the school complexes and the steering committees.

The School Complex Scheme substantially contributes to the upliftment of teacher competencies through its minimum programme for member school units. The minimum programme is designed with an objective to create among the learners interest in the subjects. The programmes are also meant to kill monotony in teaching-learning methods through a variety of subject activities. Other activities like Vachan Sadhana, an innovative/novelty function also cater to the enhancement of teacher competency.

There are other agencies, which show a great concern to the improvement of quality of education in the state. The private managements are running institutions under the education Act-1986 that regulates opening, functioning, and closing of educational institutions.

In conclusion, it can be said that the state has a well coordinated Academic and Administrative Support System that works towards improvement of the quality of education. Still, many more reforms in this system could be foreseen in the coming future.

CHAPTER 9

Resources for School Education and Literacy Programmes

In the mid 90's, the state began to think of school education in terms of quality improvement as the target of 100 per cent literacy and success in retention of school children at the elementary stage were in sight. The state has received support of internal and external resources in the task of providing educational facilities in terms of qualitative coverage, as is evident from the data given in the earlier pages. Major allocation of budgetary priorities, given to education by all the governments that came into power since 1961, deserves a high note of appreciation for this attainment. It is equally appreciable that the budgetary share of education did not suffer in the least, even after 1987 when this territory became a full-fledged state and remained no longer a union territory.

The state has been a beneficiary of generous resource support from the Ministry of Human Resource Development, Government of India in its efforts at implementing schemes like Operation Blackboard, Total Literacy Mission, Improvement of Science Education in schools etc.

The state also received assistance from UNICEF for carrying out projects of Primary Education Curriculum Renewal (PECR), Development and Cooperation of Community Project (DECAP) and Promotion of Early Childhood Education (ECE). The following pages will review various resources used towards upliftment of school education in the state in last 40 years of liberation.

In the early period of liberation, the resources used for educational development and the State's share in them could be seen in the following Table:

Table 9.1: Education and Expenditure on Sources (in Lakhs)

S.No.	Sources	1964-65	65-66	66-67	67-68	68-69	70-71
1.	Govt. funds	129.23	189.51	206.99	262.63	225.31	237.39
2.	Local Body Funds	0.97	0.06	0.16	0.12	—	—
3.	Endowments and other sources	18.46	20.73	18.88	12.83	18.32	17.81

The chart spans the period of expenditure from 1965 to 1971. It also provides details of the share of Local Body Funds and Endowment and other sources. The data indicates that:

❖ The government funds had the largest share as a major source of expenditure on education.
❖ The expenditure increased through years from Rs 129.23 lakhs to 262.63 lakhs within a period of 5 years.
❖ Local Body Funds decreased continuously from Rs 0.97 lakhs to 0.12 lakhs up to 1967-68.
❖ Endowment and other sources show even level of expenditure over these years in range of Rs 18.46 lakhs to Rs 17.81 lakhs.
❖ From the table it becomes clear that the state had been positive in its outlook for educational development and spent handsomely on education.

The following graph shows the increase in the Government Funds from 1965 to 1971. The highest amount spent on education during this period was Rs 262.63 lakh.

Graph 9.1: Government Expenditure on Education
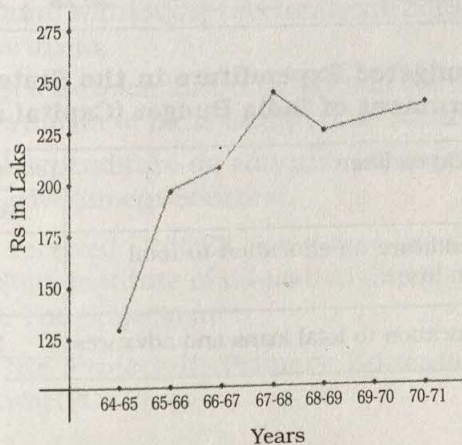
As per the figures of budgeted expenditure of the years 1981 to 1983 it is clear that the state budget had a substantial share for education both under plan and non-plan heads. The other departments also spent amount on education. The following data shows the position:

Table 9.2: Budgeted Expenditure on Education Budget (Revenue Account)

S. No.	Details of expenditure	Unit	Years of Reference		
			1973-74	1983-84	1991-92
1.	Expenditure on education and training by all departments to total budget	%	27.4	21.6	23.1
2.	Plan expenditure on education of Education Department	%	29.4	16.4	18.4
3.	(A) Plan expenditure on education and training by all departments to total plan expenditure	%	30.4	25.7	22.2
	(B) Budget sectoral expenditure of education department				
	• Primary Education	%	32.3	34.3	28.3
	• Secondary Education	%	52.9	49.5	49.5
	• Adult /Special Education	%	0.3	0.7	0.9
4.	Average expenditure	%	29.23	24.27	23.73

Table 9.3: Budgeted Expenditure in the State Excluding Government of India Budget (Capital a/c)

S. No.	Indicator of expenditure	Year wise Percentage	
		1983-84	1991-92
1.	Capital expenditure on education to total capital expenditure	0.9	3.5
2.	Loans for education to total loans and advances	2.3	2.5

Table 9.4: Total Expenditure on Education
(From Govt. and Non-Govt. Sources)

S.No	Indicator of Expenditure	Unit	Years	
			1973-74	1983-84
1.	Per-capita expenditure on education (at current prices)	Rs	61.778	184.43
2.	Educational expenditure to state income (at current prices)	%	4.82	4.34
3.	Recurring expenditure to total expenditure on education	%	92.45	91.60
4.	**Expenditure on education by objects (at current prices)**			
	▪ Salaries to teachers	%	70.00	67.2
	▪ Salaries to other staff	%	9.7	10.5
	▪ Maintenance of equipments and other items	%	12.2	0.4
	▪ Expenditure on direction and inspection to total expenditure	%	2.5	2.7
	▪ Other items.	%	5.1	11.2
5.	**Per pupil Recurring Cost (at current prices)**			
	▪ Primary Schools	Rs	148.1	459.0
	▪ Upper Primary Schools	Rs	112.5	205.8
	▪ Secondary/hr. Secondary Schools	Rs	240.7	482.1

The above data provide details about:

❖ Budgeted expenditure on education Budget (Revenue Account) with Budget sectoral expenditure of Education Department.

❖ Budgeted expenditure on education in the State excluding Government of India Budget (Capital Account).

❖ Total expenditure on education (from Government and Non-government Sources)

The state received UNICEF assistance to carry out projects through the State Institute of Education during the decade from 1980 to 1990. The projects are:

❖ UNICEF Project II: Primary Education Curriculum Renewal (PCER).

❖ UNICEF Project III: Development of Activities in Community Education and Participation (DACEP).

❖ UNICEF Project V: Comprehensive Access to Primary Education (CAPE).

❖ UNICEF Project IV B: Early Childhood Education (ECE).

The details of the above projects are given in the following table:

Table 9.5: UNICEF Projects Run In The State Since 1980

S. No.	Name of The Project	Year of Starting The Project	Activities Carried Out Under The Project
1.	UNICEF Project II: Primary Education Curriculum Renewal. The activities were carried out by the Curriculum Development Cell of this Institution.	1980	1. Development of Instructional Materials for Primary Classes I to IV **Development of material such as**: ❖ Curriculum of Primary textbooks of all subjects for Classes I to IV. ❖ Teachers' Handbooks in all the subjects. ❖ Workbooks in all the subjects 2. Trial of the draft materials in 30 selected schools and improvement in the said material on the basis of the feedback received from the teachers and as per the recommendations of the high level committee. 3. Training and orientation of teachers and teacher educators for appraisal of the New Curriculum of Primary Education.
			1. Development of supplementary reading materials for teachers and community workers. 2. Development of supplementary reading materials for neo-literates.

2.	UNICEF Project III: Development of Activities in Community Education and Participation (DACEP)	1983	**Material such as:** Ramayan - Mahabharat Condensed course in : - Mathematics-I and II - Marathi-I and II - Environmental Studies-I 4. The above said books were prepared for the dropouts under Non-formal Education mode. 5. Courses in chalk making etc. in collaboration with the Directorate of Industries. 6. Study tours to Industrial centres Materials Evaluation Meetings Competitions to encourage local Art and Culture.
3.	UNICEF Project: IV- B Early Childhood Education	1985	1. Meetings of Mukhya Sevikas and Programme Officers. 2. Two Orientation and training of Resource Persons. 3. Orientation of ADEIs and personnel under Integrated Child Development Scheme (ICDS). 4. Opening and running Anganwadi Centres in the state (at present there are 1028 Anganwadi Centers working in the state).
4.	UNICEF Project-V: Comprehensive Access to Primary Education (CAPE)	1984	1. Review and Revision of revised course of Dip. in Education (D.Ed.). 2. Development of handbooks for teacher Education. 3. Development of Learning Episodes by Teacher Trainees. 4. Workshops for development of Learning Episodes. 5. Workshops for artists for finalisation of illustrations for Learning Episodes. 6. Meetings of experts.

The state adopted several centrally sponsored schemes and implemented them for growth and development of school education over last 20 years. One of the major schemes implemented in the state was Operation Blackboard Scheme.

Operation Blackboard Scheme

Under Operation Blackboard scheme the Government of India provided three components. It was a fully sponsored scheme. The three components were as follows:

- ❖ Providing an additional teacher in schools where there was only one teacher.
- ❖ Construction of two large rooms.
- ❖ Provision of teaching-learning equipment such as blackboard, maps, charts, a small library etc.

In the survey conducted by the Government of India during 1985-86, it was noticed that there were 167 Government Primary Schools with single teacher. Accordingly, Government of India sanctioned additional 167posts of teachers in these schools. The State Government filled all these posts. The Central Government reimbursed the salary of these teachers for first five years and thereafter the salary of these teachers is being paid by the State. The total amount received from the Government of India towards the salary of these teachers is 163.52 lakhs. The teachers appointed under Blackboard Scheme have been continued with the general stream.

Construction Programme

The target for the construction of Govt. Primary School buildings is fixed at 282. The total fund released by the Govt. of India was Rs 50 lakhs, which was fully utilised. At present the construction of school building is being done from state budget.

Teaching-Learning Equipments

All the Primary and Upper Primary Schools in Goa are provided with teaching-learning equipments under the Operation Blackboard Scheme. Some schools still require to be supplied with teaching-learning equipments like maps, Science Kits etc. All the three components of operation backboard are to be continued with the state budget.

Central assistance has been received by the state to conduct teacher-training programmes under Special Orientation of Primary

Teachers (SOPT) and Programme for Mass Orientation of School Teachers (PMOST) at the primary stage. 100 per cent primary teachers are covered in SOPT programmes. The state has given a grant of Rs 40 lakhs for the total literacy mission. The District Institute of Education and Training (DIET) in the State also runs under the 100 per cent centrally sponsored scheme.

Improvement of Science Education in Schools

The Scheme of Improvement of Science Education in schools runs in the State under Central Assistance. Activities like providing Lab materials and library books to Secondary and Higher Secondary Schools are taken up by the state. The state has covered 100 per cent Middle Schools and Government High Schools under the central scheme of New Educational Technology. T.V. sets are provided to the schools under this scheme. The state has shared its funds to equip all government high schools.

The state has made provision for award of scholarships and stipends to enhance educational opportunities to all. The following table presents details of Incentive schemes with the number of beneficiaries since 1997.
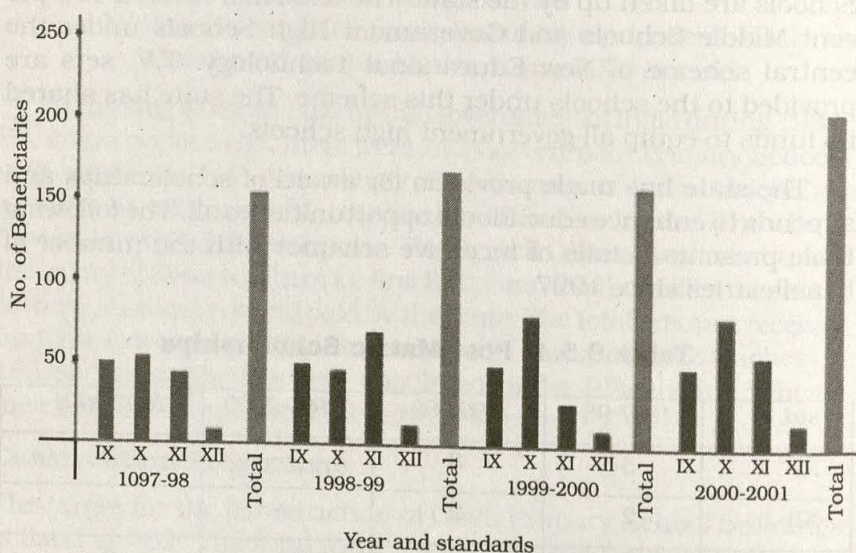
Table 9.5.1: Post-Matric Scholarships

std.	1997-98	1998-99	1999-2000	2000-2001
XI	3	3	—	3
XII	2	2	—	—
Total	5	5	—	3

Table 9.5.2: Sanskrit Education Scholarships

std.	1997-98	1998-99	1999-2000	2000-2001
IX	50	50	50	50
X	57	48	90	89
XI	41	63	16	44
XII	10	08	09	19
Total	158	169	165	202

It is notable in table 9.5.2 that the number of beneficiaries has increased from 1997-98 to 2000-2001.This indicates that Sanskrit Education in the state is being encouraged considerably. At the same time it indicates that the number of beneficiaries of the scholarships is very low in Class XII. Students at this stage require motivation for learning Sanskrit. The following graph depicts the position.

**Graph 9.2 : Sanskrit Education Scholarships –
Number of beneficiaries since 1997-2001**

Year and standards

**Table 9.5.3: National Scholarships for the Award of
Merit Scholarships for Post-Matric Study.**

Std.	Year- wise Beneficiaries				Total
	1997-98	1998-99	1999-00	2000-01	
XI	338	315	353	350	1356
XII	4	6	6	7	23
Total	342	321	359	357	1379

An amount of Rs 2, 43,460 was spent on the award of these scholarships to 1379 students. A total of 10,855 students

belonging to SC/ST, OBC and Physically Handicapped categories came under the coverage of various awards as shown in the following table:

Table 9.5.4: Schemes for SC/ST, OBC and Physically Handicapped Students (1997 to 2001)

S. No.	Name of the scheme	Type of Beneficiaries	No.of Beneficiaries	Amount (Rs In lakhs)
1.	Stipend for SC/ST and Meritorious scholarships for SC students	SC/ST students	648	2.99
2.	Grant for textbooks and exercise books, stationery, uniforms and stitching charges	SC students	587	1.56
3	Post-Matric scholarship for students of X and XII	SC/ST students	63	1.97
4.	Educational programmes : Grant of stipend	SC/ST students	9063	45.46
5.	Post-matric Scholarships (XI-XII)	OBC students	283	9.17
6	Grant of stipend	Physically handicapped students	198	1.23
7.	Grant of Stipend for Post-Matric studies (XI and XII)	Physically handicapped students	13	0.23
	Total		10, 855	62.61

The State Directorate of Education also awards scholarships to the students from Educationally Backward Class under its Rajiv Gandhi Shiksha Sahay Yojana. The number of beneficiaries and the amount of award during last four years from 1997-98 to 2000-2001 are as given in the following table:

Table 9.6: Number of Beneficiaries and Amount of Scholarships Awarded Under Rajeev Gandhi Shiksha Sahay Yojana from 1997-98 to 2000-2001

Year	Classes	No. of Beneficiaries	Amount of scholarship (Rs)
1997-98	V-X	6169	1998100
	XI-XII	944	708000
	Total	**7113**	**2706100**
1998-99	V-X	7212	2345850
	XI-XII	706	529500
	Total	**7918**	**2875350**
1999-00	V-X	3134	1036700
	XI-XII	352	264000
	Total	**3486**	**1300700**
2001-01	V-X	6166	1807250
	XI-XII	396	297000
	Total	**6562**	**2104550**
	Gross Total	**25,279**	**8986400**

Amount of scholarship per head per annum:
- ❖ Classes V-VII @ Rs 250
- ❖ Classes VIII-X @ Rs 400
- ❖ Classes X-XII @ Rs 750

According to this table:

- ❖ Amount of Rs 7187900 was utilised to award scholarships to 22681 students for availing of educational facilities from V-X under this scheme over a period of four years from 1997 to 2000-2001.
- ❖ A total of 2318 students of XI-XII received scholarships under this scheme during the period of 4 years. An amount of Rs 1798500 was utilized to extend benefits of these scholarships.

Talent Search Scholarships

Incentive Scholarships

The State Institute of Education conducts Talent Search Examinations every year for award of scholarships to the talented

students from rural areas of the state. **Incentive Scholarships** are given to the children from slum areas, wards of landless labourers etc. The following table furnishes the details of number of beneficiaries and the amount of scholarships awarded during the period from 1997-98 to 2000-2001.

Table 9.7.1: Number of Beneficiaries and Amount of Award of Incentive Scholarships at the End of Class IV for Education in Classes V-VII (Rs 400 each)

Target Group: Rural and Slum Areas		
Year	No. of Beneficiaries	Amount of awards
1997-98	465	Was not awarded due to the lack of funds
1998-99	450	1, 80, 000
1999-00	530	2, 12 ,000
2001-02	537	2. 14 .000
Total	1982	6, 06, 000

The State Government awards these scholarships.

Rural Talent Search Examination

The State Institute of Education conducts the Rural Talent Search Examination for the award of the scholarships to the students to enable to continue their education at the secondary stage. The students studying in the eighth standard are eligible for the award of this scholarship. The details of the beneficiaries and amount spent on the scholarships are given in the following table:

Table 9.7.2: No. of Beneficiaries and Amount of Award of Scholarships to Facilitate the Students to Avail of Education in std. VIII-X (Rs 300 each)

Target Group Children from Rural and Slum Areas		
Year	No. of beneficiaries	Amount of awards (Rs)
1997-98	260	78,000
1998-99	251	75,300
1999-00	246	73,800
2000-01	252	75,600
	1009	3,02,700

Funds for the above scholarships are provided by NCERT, New Delhi.

Science Talent Search Examination

These examinations are conducted by the State Institute of Education to identify talented students in the subjects of science and mathematics. Students studying in the secondary classes are eligible for the award of these scholarships.

Table 9.8: Number of Beneficiaries and Amount of Awards of Scholarships: Science Talent Search (Rs 250 each)

Target Group: Students of VIII to X Total Scholarships 50 in Each Class (50 x 3 = 150)		
Year	*No. of Beneficiaries*	*Amount of Awards (Rs.)*
1997-98	150	37,500
1998-99	150	37,500
1999-00	150	37,500
2000-01	150	37,500
Total	600	1,50,000

All types of scholarships: **Total number of Beneficiaries: 3591**
                                   Total amount of awards: Rs 11, 12,700

The state has encouraged various schemes to promote people's participation in education. One of the major schemes having participation of all schools with heads of the institutions, teachers, pupils, parents, and opinion leaders is the School Complex Scheme. By the year 2000 there were 236 school complexes and super school complexes in the state. The Directorate of Education provides funds for this scheme. It is remarkable that there is a well-structured network of school complexes at different levels headed by the State Level School Complex Committee. This scheme is an example of a balanced blending of the Government and Non-government machinery based on a spirit of cooperation for:

❖ Breaking isolation,
❖ Sharing resources and
❖ Improving quality of education at all levels of school education.

The state has evolved detailed guidelines for efficient functioning of school complex scheme.

Though there are no Village Education Committees (VEC) in the state, Parent Teachers' Association (PTA) having involvement of school authorities and parents are actively functioning in the state. Each school is meant to have its Parent Teacher Association with its executive committee and general body. Normally the General Body meets once in a year and elects the executive committee for a period of two years. The executive body comprising of parents and teachers meets twice in a year. This is one of the most interactive set-ups functioning in the state. The PTAs are at times instrumental in providing resource and facilities unavailable in the school.

Apart from these two well-built and active structures there are institutions that contribute to the progress of school education. One of such NGOs functioning in the state is "Sangath" that deals with children with special need and dropouts. It takes up activities like:

- ❖ Parents counseling,
- ❖ Teacher training for awareness creation,
- ❖ Survey and research work.

Among other NGOs, which indirectly or directly share the task of uplifting education, are Lokvishwas Pratisthan and Matrichhaya. Besides the above agencies, the State Directorate of Education has launched the following schemes for resource mobilisation.

Students' Insurance Scheme was launched in 1989-90. All students in the state in various institutions are insured against death due to accident, drowning etc. for Rs 10,000. In such cases the insurance company directly pays the amount to concerned parents after completing formalities.

Scheme of Vyaspeeth

The scheme was launched with the objective of encouraging creative talent in the students of Class IV and above. Teachers having a flair for these activities were deployed for this scheme. Under this scheme following programmes were organised.

- ❖ Cultural activities,
- ❖ Folk dances,
- ❖ Competitions in drawing and painting.

The Directorate of Education has made arrangement of lump sum amount of Rs 8000 per taluka towards the payment of TA/DA of such teachers who paid visits to different schools in the vicinity for the purpose of organizing programmes. The conveners were paid an honorarium @ Rs 250 per month. Provision of Rs 3000 for contingency expenditure @ Rs 250 per month has been made for each taluka. A sum of Rs 30000 was allotted for the purpose of purchase of musical instruments and tape recorder etc. The Directorate of Education also made an amount of Rs 4500 available for all these programmes in each taluka. Besides the said provision, scholarships were awarded to talented students.

The scheme was implemented in a phased manner as shown below:

Table 9.9: Implementation of the Scheme of Vyaspeeth

Year	No. of Talukas to be Covered
1993-94	3
1994-95	3
1995-96	5
Total	11

An amount of Rs 3, 87,000 was provided in the first phase to Sattari, Ponda and Canacona Talukas in the year 1993-94. The other plan schemes launched by the Directorate of Education are as given in the following table.

Table 9.10: Plan Schemes of the Directorate of Education

S. No.	Name of the Scheme	Concept and Functions	Activities Carried Out	Amount of Expenditure
1.	Competition on environment	To organise competitions on environmental topics for National Environment Awareness Campaign	**Competitions in** • Drawing • Posters • Essay • Elocution	Rs 57,550=00
2.	Environmental study tour	Visit to a place as allocated such as sanctuaries, forts etc.	• 'Visit to a place of environment interest. • Students reporting in oral/written form. • Filling in a	Actual traveling expenditure and Rs 120 for best students

			questionnaire. • Drawing pictures, writing poems, stories base on the tour.	activities @10/-
3.	Clean school beautiful school	Participation of school children in keeping their school clean and tidy. Emphasis on keeping our environment clean.	• Providing clean and filtered drinking water in the school. • Clean and tidy rooms, play ground etc. • Arrangement for sanitation facilities. • Maintaining personal hygiene. • Making arrangement for waste -paper box. • Providing for doormats.	Prize money for the award to the best school Rs 34,600
4.	Plantation of trees/ green leafy vegetables /Yellow fruits/ Raising nursery	Encouraging vegetables and nurturing environment	Plantation as implied	Rs 2000 per school
5	Study tour of teachers to the Project undertaken by NGOs /individuals in respect of protection/ forestation/ sustainable development/ Environment friendly activities	Encouraging study of project	• To pay visits. • To prepare a study report.	
6.	Audio visual schemes.	Use of A.V. Aids/ materials in teaching -learning process	• Film shows in schools. • Supply of A. V. material to schools and ADEI offices. Establishment of film library.	
7.	Mini JSN scheme through Youth clubs and Mahila Mandals	Upgrading of skills of neo-literates	To organise awareness creative activities for neo-literates	Rs. 14000/- as financial assistance

The state has effectively mobilised resources, utilising the existing resources and creating additional resources for the growth and development of school education in the state since liberation.

CHAPTER 10

Future Tasks and Perspectives

G oa joined the mainstream 15 years after Indian Independence but it has succeeded in creating a dynamic and vibrant education system, which generally meets the needs of the state. This has been possible because the education in the state has always been a top priority ever since 1961. The average area and population served by education is higher than that of the all-India data. The state ranks fourth in literacy. Effective implementation of family welfare programmes and measures for curbing the dropout rates have exercised positive impact on the growth and development of education in the state. Public awareness and attitude towards education have also favoured rapid development of education and supported universalisation of elementary education almost to the optimum.

The enrolment in the primary schools in last five years has reached 100 per cent attainment while the dropout rate is quite marginal. The state provides adequate educational facilities and the people in the state have a variety of educational opportunities at their doors. Children are given free education up to Higher Secondary level. Provision of free textbooks, notebooks, uniforms, raincoats, and mid-day meals at Primary Stage have boosted enrolments and have encouraged retention of children in the schools.

Various schemes introduced in the State have contributed towards quality of education that includes provision of induction level and in-service teacher education programmes. The schemes, thus, have also enabled the state to design and develop Primary and Upper Primary Curriculum as per its needs and aspirations.

The reforms in transactional processes of education and evaluation have also been put into practice.

Educational scenario in the state has still some areas, which call for urgent attention and require to be effectively dealt with. Issues like reducing the dropout rate at the end of the Secondary Education (i.e. std. X), providing opportunities to the children from the marginalised groups of society, introduction of NCERT curriculum framework of school education in the State, institutionalisation of Pre-school Education, capacity building of the resource institutions are some of the major concerns for quality improvement of school education. The emerging trends of globalisation and their impact on the teaching - learning processes demand changes in transactional methodologies which can not afford to be 'traditional' and just 'book oriented'. The emerging 21st century trends would therefore need equipping students with self learning abilities so that they take initiatives in learning and undertaking research at the advanced stages of education.

In spite of a large number of educational attainments, measures are still needed to be taken to overcome a few deficiencies left in the system. Issues emerging out of trends like globalisation, Information Technology (IT), Computer Education, Value Education require to be tackled. Quality and standard of education in terms of curriculum, teaching-learning processes, teaching materials, instructional materials, physical facilities available in the schools, evaluation procedures and students' performance need special attention of experts and authorities. The sub-committee set up by the Planning Board of Education presented its reports in 2000. The committee examined the scenario of School Education. While describing the educational scenario in the state the document on Ninth Five Year Plan has also observed:

> *It is quite interesting to note that, whereas the enrolment at Primary, Middle, and Secondary level is going down, it is going up at Higher Secondary and above.*

The data confirm this observation. The following graph shows the scenario described in the statement of the Ninth Five Year Plan.

Graph 10.1: The Percentage of Fall/Rise in the Enrolment and Number of Teachers at Different Stages of Education

Number of Teachers and Students
Enrolment (IX Plan)
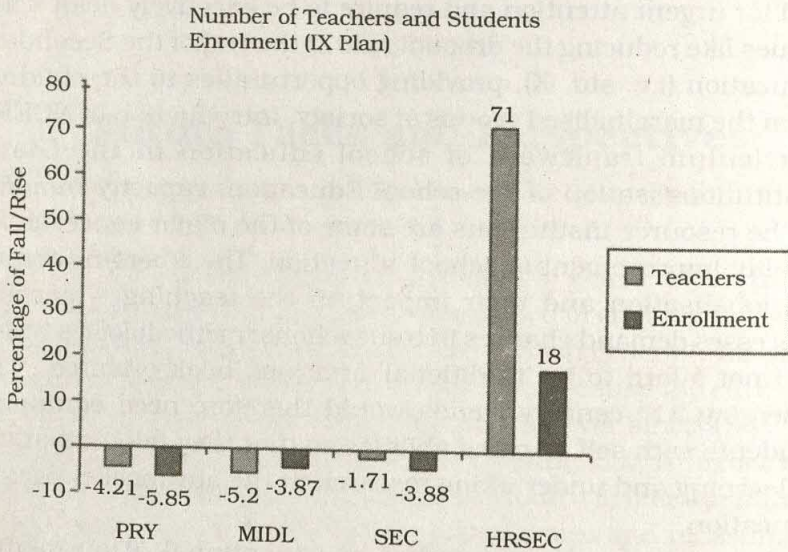
The above graph indicates a kind of imbalance in the system. It needs to be effectively handled. It is clear from this graph that:

❖ The number of teachers has fallen down by 4.21 per cent while the enrolment suffers a fall of 5.85 per cent at the primary stage. The fall is comparatively more than that in the other stages.

❖ Another major fall is in the number of teachers at the Middle school stage. It is 5.2 per cent.

❖ The growth in number of teachers in Higher Secondary Schools is very high. It is 71 per cent, while there is growth of 18 per cent in the enrolment. It is not proportionate with the growth in the number of teachers at this stage. The prevailing scenario portends the following.

The fall in the student enrolment will not be favourable in the long run and would ultimately affect enrolment at higher secondary level, even though measures to reduce dropout rates at different stages of education are successful. The causes attributed to this scenario are stated to be:

❖ Effective implantation of family welfare programmes.

❖ Successful measures at curbing the dropout rates.

As it is, the dropout rate at standered X is really a matter of concern. The statistical data of the year 2000 shows that the dropout rate at standered X is about 43.48 per cent in respect to the students (boys and girls) coming from general categories. It is still very high in case of the students belonging to the SC/ST categories. The dropout rates of SC students is 72 per cent whereas it is 96 per cent in case of ST students. The average dropout rate, thus, is 64 per cent. Hence, the claim of *'successful curbing of dropouts'* may need to be critically examined. It is, of course, true that the dropout rate at the lower levels is very less. It is 6.37 per cent at Primary Stage and 9.36 per cent at the Upper Primary Stage.

This chapter further highlights some other issues in the filed of education and offers new perspectives. The future tasks include:

❖ Institutionalisation of Pre-school Education

❖ Providing Quality Education

❖ Envisioning Relevant Curriculum

❖ Ensuring Equity in Education

❖ Capacity building of the Resource Institutions

❖ Revamping Teacher Education in the State

The following passages stipulate more details on the above points.

Institutionalisation of Pre-School Education

The State has 1162 pre-school institutions offering courses of different nature. The institutions involved in this task function in different set-ups like Balwadis/Anganwadis, Kindergartens (KGs) and Bal Vikas Mandirs. These institutions provide instruction in Konkani, Marathi and English medium. The Kindergartens (KGs) and Bal Vikas Mandirs are run by private managements and usually impart instruction in English and Marathi medium respectively. The Anganwadis are run under the Integrated Child Development Scheme (ICDS) both in Konkani and Marathi medium. There are a few Pre-School Classes run by the Directorate of Education along with the Government Primary Schools. So far the State is not providing any special assistance to these institutions hence they charge fees from the parents.

As per the data provided in the All India Survey Report-1993, nearly 35000 children are enrolled in these institutions and around 1400 teachers are working in these schools. It is felt necessary to institutionalise the pre-school education in the light of the fact that such education would prepare the students for elementary education. Teaching-learning processes adopted in these schools need to be child-centered and activity-based as the young ones need to acquire basic life-skills and develop them into enduring habits. Socialisation, value development, cleanliness habits, attaining minimum language and number literacy at this stage may be introduced in play-way manner. This would make it necessary to institutionalise the pre school education in terms of, rules and regulations of admission and teacher recruitment, teacher qualifications and training, development of curriculum, and systems of evaluation, etc.

Providing Quality Education

Quality and standard of education in terms of curriculum, teaching-learning processes, teaching materials, instructional materials, physical facilities available in the schools, evaluation procedures and students performance need special attention of experts and authorities. The Sub-committee constituted by the Planning Board of Education examined the scenario of school education in the State in the context of the following terms of reference:

❖ Quality and Standard of school education
❖ Skill Developments
❖ Teacher Education
❖ Information Technology

It stated in its Report that attention is particularly needed for improving textbooks, workbooks, and teachers' handbooks. There is a need for constant monitoring and inspections of teaching-learning processes adopted by the teachers, ensuring that the teachers make use of necessary teaching aids and other instructional materials, linking library work to learning. Attempts of providing quality education shall include developing self-learning skills. Development of life-skills and values in the learners would also be an important aspect of school education.

Teachers are also needed to keep abreast of the new trends in education at the national level. They need to be acquainted with the interventions offered by apex educational institutions at the state and national level. Understanding new approaches in education practiced in various institutions, schools and organisations, and incorporating them in day to day teaching routine would be necessary. It is also advisable that new practices may be tested periodically for further improvement.

Envisioning Relevant Curriculum

Goa is a small coastal state situated in the West having tourism and fisheries as its main occupations besides mining. Tourism provides it dear benefits in terms of commercial gains. Educational implications could be found in various occupations related to tourism. Provision of tourism as a subject could be considered for introducing it in the curriculum. The same could be said of fisheries as the State is gifted with the sea wealth. Training and skill development in occupations related to fisheries also could be a concern of education. Inclusion of these subjects at the secondary stage would add a dimension of relevance to the curriculum. It would also be a special feature of the State's educational scene. It is necessary to take into account that these subjects are already in the State's Vocational Curriculum. In this context, steps may also be considered to popularise these subjects among the learners with an assured placement. Help of National Institute of Oceanography (NIO) could also be sought to enrich the curriculum with the components and contents of oceanography in the curriculum at the secondary stage. The National Institute of Oceanography (NIO) is functioning in the state and can substantially contribute to devise syllabi for the learners.

Equity in Education

Equity in terms of providing special attention to the educationally weaker sections of society and marginalised groups would be another important consideration. It is obvious that there are a large number of labourers in the state. The labour is required for farming, mining, and construction work in the State. The labour families keep on changing their places or cites as their work changes. Mr. LMT Fernandes, Assistant Director of Education mentioned it as the 'floating population' in the state. He mentioned that as most of the dropout at the end of the primary schooling is

due to the children belonging to the floating population, opportunities of learning could be offered to the children through residential or mobile schools.

Setting up of Inclusive Schools could also be another consideration in which children with mild disability will have opportunity to learn with the normal children. Such schools would be equipped with the facilities needed for such children with special needs.

Capacity Building of Resource Institutions

The State has two teacher education colleges and one DIET that offer teacher education courses both at induction level and in-service stage. DIET is a Centrally Sponsored Institution functioning at the district level. Apart from teacher education it is necessary for the institute to take up the tasks of Lab areas and Action Research. It is also necessary for it to work for curriculum, materials development, and evaluation. In this view, it would require an urgent step to strengthen the DIET in terms of facilities and man power. Similarly upgrading of SIE into SCERT, which is contemplated for a long time, would also be considered. The SCERT equipped with facilities and man power may have in it Educational Technology Cell.

Strengthening School Complexes

School Complex Scheme activated effectively in the recent past may also need to be catered into a strong network as it provides a link between the apex educational institutions in the State and the grass root institutions. Its association with the schools, students, teachers, parents and the people concerned with education would be more fruitful in form of feed back for these institutions to work out suitable educational programmes for effective interventions.

Revamping Teacher Education in the State

There are two colleges of Education that offer Teacher Education at the secondary stage. These colleges are functioning as per the norms laid down by the NCTE. They are also organising teacher education programmes for the in-service teachers through their Extension Service Departments. It would be worthwhile for them to consider introduction of the two-year Teacher Education (B.Ed.) Course. Among other programmes, adoption of educationally

backward areas, organisation special in-service programmes on Commitment could also be major considerations.

Besides the above tasks of prime consideration for the future educational development, initiatives suggested by the Sub-committee of the Planning Board of Education assume equal importance, particularly in the context of Teacher Education and equipping schools with Educational Technology. The Committee. perceived that action may be taken to introducing Interactive Distance Education, introducing Smart Schools, and setting up Virtual Institute for Training.

Interactive Distance Education

The Committee explains the following features of the Project.

❖ To create a set-up in the State to cover all major Colleges, Higher Secondary Schools and Secondary Schools (100 centres to begin with) with the main purpose of supplementing classroom education by expert lectures, practical sessions, case studies etc.

❖ Satellite TV technology to be used (for) lectures/ programmes to be up-linked and received via low-cost Direct Reception System (DRS) on TV sets/projection TV in the remote classrooms.

❖ Interactivity (Question/Answer session) by telephone feedback from the remote classroom.

The committee thus foresees the State to become a virtual classroom both for school education and training of teachers. It states-

> *With this, the entire State to become a Virtual Class room; the system could also be usable for teacher training and any other training operations in the State, during spare time; a 10 day experiment was successfully conducted at Goa University with the help of ISRO during December 1997 to demonstrate the feasibility of this project.*

Smart Schools

The Committee visualises the project in the following terms:

❖ Two identified Secondary Schools (one each in North/South Goa) to be fully equipped with computers and IT facilities for providing IT-enabled education, as a pilot project.

❖ To help in using IT in education/training in an interactive way to learn different subjects on their own and also to make students more IT minded.

The Committee therefore, suggests that Goa University may develop the required course materials in electronic form with the help of trained teachers and also to provide all the coordination and support to implement the project.

Virtual Institute for Training

The Committee elaborates on the project in the report as:

❖ To develop learning material using subject experts in electronic form for advanced courses like MCA and in other identified advanced level subjects and make them available in CD form for users all over India;

❖ It will also include web based (internet) education to provide on-line course for students in Goa and elsewhere. According to the Committee the final goal of the project is to set-up a Virtual University for chosen subjects in Goa. The step will have positive impact on school education too.

Conclusion

The State has a potential to take active steps into these initiatives as it has already attained fundamental requirements such as 100 per cent enrolment and 82 per cent literacy having male-female share of almost 50 per cent in each respect. The following data compares achievement of Goa with all-India figures.

Education System Indicators – Goa and India: A Comparison

Parameter	Goa	India
No. of students enrolled – Primary to Higher Secondary levels per 1000 of population	232	173.68
Enrolment in higher education (all colleges per million of population,	16,000	4,825
Out turn of graduates per lakh of population	140	30
Teacher-student ratio		
▪ Primary Level	1:31	1:40
▪ Middle Level	1:25	1:32
▪ Secondary Level	1:30	1:34
▪ College Level	1:21	1:20

With setting up of DIET in the year 1990 the State has boosted opportunities for teacher education and has accelerated the process of in-service teacher education. Active involvement of the School Complex Scheme in this field is also quite considerable. The Extension Service Departments also have their contribution to the field. This has provided ground to quality education in the State, which could be toned up still further. Given the scope of initiatives, the State is sure to set itself as an example in the educational achievements in the country.

The educational growth and development in the State implies a promising future. A tiny coastal region of India has shown a steady progress in education since its liberation in 1961, fifteen years after the Independence and still is performing well. The State has definitely to play a more pioneering role in future.

References

- Status Report on Education in Goa: 1995-96 Directorate of Education, Panaji.
- Annual Reports of SIE since 1984.
- Scheme of Examination and Evaluation for Standards VIII, IX and X, GBS and HSE.
- Challenge of Education, a policy perspective-Ministry of Education, Govt. of India- August 1985.
- Scheme of Subjects for Studies and Examinations for Standards XI and XII GBS and HSE.
- Results of SSC and HSC Examinations, since 1995.
- Official Gazette, Government of Goa – Sept 2, 1996. Series 1 Number 22.
- Educational Statistics at a Glance, Vol. 1981, 1990, 1991-92 and 2000-2001.
- Selected Educational Statistics 80-81.
- Population Education Bulletin July 2001.
- An Economic Review of Goa, Daman and Diu, 1961-71— Bureau of Economic, Statistics and Evaluation.
- Fifth all India Survey: Selected Statistics – Education of SC/ST: MHRD, Govt. of India.
- Draft Report of Sub-committee on Education, Planning Board of Goa, July 2000
- Scheme of Vocational Education, GBS and HSE.
- New Primary Education Curriculum, Directorate of Education.
- Curriculum-VII Directorate of Education.
- Curriculum: VIII, IX and X, GBS and HSE.
- Curriculum: XI and XII, GBS and HSE.

- A Handbook of Educational and Allied Statistics, MHRD, April' 87.
- Sixth All India Educational Survey, National Tables, Vol. I – Educational Facilities – Rural and Urban Areas, NCERT, New Delhi.
- Sixth All India Educational Survey, National Tables Vol II – Schools and Physical Facilities, NCERT, New Delhi.
- Literacy Campaign in India: Annual Report-1997-98, Directorate of AE, MHRD.
- Selected Educational Statistics-1995-96, MHRD.
- Draft Ninth Five Year Plan (1997-2002), Directorate of Planning, Statistics and Evaluation, Panaji.
- Education for All: Year 2000 Assessment, NIEPA, New Delhi.
  Educational Administration in Goa: Structure, Processes, and Future Prospects – Baldev Mahajan, J.C.Goyal, R.V.Urankar. Pub. NIEPA, New Delhi.
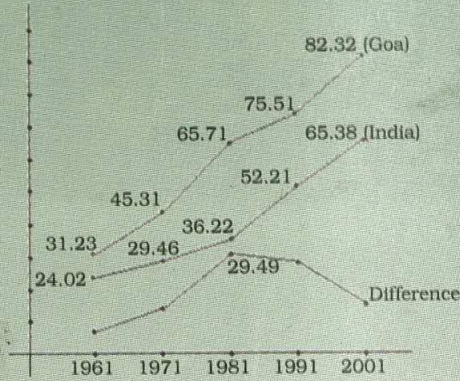
CONSTITUTION OF INDIA
Part IV A

Fundamental
Duties of Citizens

ARTICLE 51A

Fundamental Duties – It shall be the duty of every citizen of India —

(a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;

(b) to cherish and follow the noble ideals which inspired our national struggle for freedom;

(c) to uphold and protect the sovereignty, unity and integrity of India;

(d) to defend the country and render national service when called upon to do so;

(e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diverstities; to renounce practices derogatory to the dignity of women;

(f) to value and preserve the rich heritage of our composite culture;

(g) to protect and improve the natural environment including forests, lakes, rivers, wildlife and to have compassion for living creatures;

(h) to develop the scientific temper, humanism and the spirit of inquiry and reform;

(i) to safeguard public property and to abjure violence;

(j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

(k) who is a parent or guardian to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.

82.32 (Goa)

75.51

65.71   65.38 (India)

52.21

45.31

31.23   36.22

29.46

24.02   29.49

Difference

1961   1971   1981   1991   2001

Literacy Rates : Goa and India : a comparative perspective

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
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